GBPPR 'Zine

Issue #34 / The Monthly Journal of the American Hacker / January 2007

"For me, it made a huge difference being in Europe during the NATO bombing. Kosovo was closer, and felt closer. It is about the same difference from Amsterdam that South Carolina is from New York. Yet as the bombing proceeded, life in Amsterdam went on without any perceptible change. Nobody we talked to brought up Kosovo. Perhaps there was nothing to say.

...

Kosovo showed that Europe, when left on its own, is hopelessly impotent in the face of tyranny in its backyard, unable to move beyond dialogue with murderers."

–––– Excerpt from *While Europe Slept* by Bruce Bawer.

New Year's Resolution for 2007: *Destroy Europe*

Table of Contents

- **Page 2 / Plant Measurements Description / #1A ESS**
  - Overview and descriptions of the plant measurement print–outs on a #1A ESS.
- **Page 50 / Nortel DMS–100 TRK163 & TRK164 Trunk Maintenance Logs**
  - Heheheh... You said log...
- **Page 53 / Triplett Volt Meter Battery Modification**
  - Handy tool for the high–voltage experimenter.
- **Page 59 / Nortel DMS–100 Equipment Counts**
  - Just how many Xs, Ys, and Zs do you have?
- **Page 70 / Improvised Counter–I.E.D. Armor – Part 2**
  - Experimental idea for homebrew ceramic hardplate.
- **Page 79 / Bonus**
  - Hackers.
- **Page 80 / The End**
  - Editorial and rants.

AT&T PRACTICE
Standard

AT&T 231-300-015
Issue 3, August 1985

PLANT MEASUREMENTS
DESCRIPTION
1A *ESS*™ SWITCH

CONTENTS PAGE

1. GENERAL 2

2. PLANT MEASUREMENTS 3

TYPES OF DATA RECORDED 3

DAILY PM01 OUTPUT MESSAGE 4

A. Base Measurements 4

B. Service Measurements 4

C. Maintenance Measurements . . . 5

D. Performance Measurements . . . 6

E. Other Measurements and Time-Out Totals 11

F. Attached Processor Measurements . 11

G. Circuit Switched Digital Capability Measurements 12

H. Improved Public Telephone Service Measurements 14

I. Remote Switching System (RSS) Measurements 14

J. AUTOPLEX™ System 100 15

CARRIER INTERCONNECT MEASUREMENTS 15

MONTHLY PM02 OUTPUT MESSAGE . . 16

PROGRAM INTERFACES 18

PM03/PM05 OUTPUT MESSAGE RESPONSE TO PLNT-MEAS INPUT MESSAGE 18

PROTECTION OF PLANT MEASUREMENTS . 19

3. GLOSSARY OF ABBREVIATIONS AND ACRONYMS 20

Figures

1. Configuration of the Basic Performance Measurements 23

2. The Base and Service Measurements of the PM01 Output Message 24

3. The Maintenance Measurements of the PM01 Output Message 25

4. The Central Processor and Bus System Performance Measurements of the PM01 Output Message 26

5. The Peripheral Units Performance Measurements, Trunk and Service Circuits Measurements, Other Measurements, and Time-out Totals of the PM01 Output Message . . 27

6. Example of the Attached Processor Measurements of the PM01 Output Message 28

7. The Circuit Switched Digital Capability Measurements of the PM01 Output Message 29

8. The Improved Public Telephone Service Measurements of the PM01 Output Message 29

9. Example of the Remote Switching System Measurements of the PM01 Output Message 30

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CONTENTS PAGE

10. Example of the Monthly PM02 Output Message 31

11. Example of the AUTOPLEX System 100 Measurements of the PM05 Output Message 34

12. Example of the Carrier Interconnect Measurements of the PM04 Output Message 35

13. Example of the PM03 System Response to PLNT-MEAS-DBS Input Message . . . 36

14. Example of the PM03 System Response to PLNT-MEAS-DEI Input Message . . . 37

15. Example of the PM03 System Response to PLNT-MEAS-DNT Input Message . . . 38

16. Example of the PM03 System Response to PLNT-MEAS-DCP Input Message . . . 39

17. Example of the PM03 System Response to PLNT-MEAS-DPU Input Message . . . 40

18. Example of the PM03 System Response to PLNT-MEAS-DTK Input Message . . . 41

19. Example of the PM03 System Response to PLNT-MEAS-DOT Input Message . . . 41

20. Example of the PM03 System Response to PLNT-MEAS-DTO Input Message . . . 41

21. Example of the PM03 System Response to PLNT-MEAS-DPS Input Message . . . 42

22. Example of the PM03 System Response to PLNT-MEAS-DRS Input Message . . . 43

23. Example of the PM03 System Response to PLNT-MEAS-DAP Input Message . . . 44

24. Example of the PM03 System Response to PLNT-MEAS-DPT 44

25. Example of the PM03 System Response to PLNT-MEAS-MBS Input Message . . . 45

26. Example of the PM03 System Response to PLNT-MEAS-MEI Input Message . . . 45

CONTENTS PAGE

27. Example of the PM03 System Response to PLNT-MEAS-MPF Input Message . . . 46

28. Example of the PM03 System Response to PLNT-MEAS-MAP Input Message . . . 47

29. Example of the PM05 System Response to PLNT-MEAS-DCS Input Message . . . 48

Tables

A. Out-of-Service Counts 8

B. Trouble Indication Counts 9

C. Error Counts 10

D. Fault Counts 12

1. GENERAL

1.01 This practice describes the plant measurement counts that are accumulated in the 1A ESS switch. The purpose of the plant measurements is to provide maintenance personnel with a concise quantitative summary of the state of central office hardware and its impact on customer service. This data is printed out by the system at the input/output (I/O) monitoring facilities (terminal) and is used by office maintenance personnel to aid them in locating and repairing problems that occur in the central office. This information also serves as valuable indicators of the condition of the system hardware so that maintenance personnel will be alerted to potential problems prior to hardware failure.

1.02 This practice is reissued to include additional plant measurements for generic programs 1AE9 and later. Revision arrows are used to emphasize the more significant changes. The following are specific reasons for this reissue.

(a) Add plant measurements data for the intelligent simplex peripheral interface (ISPI) feature. This addition includes changes to the PM01 and PM03 (PLNT-MEAS-DPU) output messages.

(b) Add plant measurements data for the local area signaling services (LASS) feature. This

addition also includes changes for the PM01 output message.

(c) Add plant measurements data for the improved public telephone service (IPTS) feature. This addition includes a new section in the PM01 message and a new PM03 output message (PLNT-MEAS-DPT).

1.03 Descriptions of peg, overflow, and usage ccunts and various types of counters are found in AT&T Practice 231-090-207, Traffic Measurements Feature Document. Also refer to AT&T Practice 231-371-001.

2. PLANT MEASUREMENTS

2.01 The plant measurements program (PPMP1A00, PR-6A089) is intended to provide maintenance personnel with information on the state of the central office hardware and its impact on customer service. This data is printed out by the system at the terminal, A configuration of the basic performance measurements is shown in Fig. 1.

2.02 Plant measurement data is printed on the maintenance terminal via the following output messages:

(1) PM01—The PM01, daily printout (Fig. 1 through 9), is printed daily at 2:30 am.

(2) PM02—The PM02, monthly summary (Fig. 10), is printed immediately following the daily PM01 printout only on the 23rd of the month.

(3) PM05—The PM05, AUTOPLEX™ System 100 plant measurement summary (Fig. 11), is also a daily summary. This message will print daily, following the PM01 or PM02, on the 23rd of the month. The PM05 output messages will be interspersed by other messages. The PM05 is utilized in offices equipped with the AUTOPLEX System 100 feature.

(4) PM04—The PM04, carrier interconnect (CI) plant measurement summary (Fig. 12), is a daily summary. This message will print daily, following the PM01 or the PM02, on the 23rd of the month. The PM04 will be utilized in 1AE8 and later offices equipped with the CI feature.

(5) PM03—The PM03, daily or monthly count summary (Fig. 13 through 28), provides PPMP1A00 counts to central office maintenance personnel upon manual request.

(6) The PM05—The PM05, AUTOPLEX System 100 daily plant measurement summary (Fig. 29), also provides counts to central office maintenance personnel upon manual request.

TYPES OF DATA RECORDED

2.03 The counts provided by the plant measurements program are basically of three types:

- Customer Service Measurements
- Hardware Performance Measurements
- Base Measurements.

Customer Service Measurements

2.04 Customer service measurements (counts) are a measure of the service received by the customer as influenced by the condition of the system's hardware. These include the number of calls or billings that are offered to the system but are delayed or lost because of faulty or marginal equipment.

Hardware Performance Measurements

2.05 Hardware performance measurements (counts) are an indication of the condition of the system hardware which is described in terms of the number of errors, trouble indications, and out-of-service intervals. These measurements may not reflect customer service directly, but do indicate how well the system is functioning.

Base Measurements

2.06 The base measurements that are provided are counts of total calls carried by the system broken into various categories. These counts are necessary to normalize service counts and performance counts of mechanical units if comparisons are to be made of offices with dissimilar traffic characteristics. (See paragraph 2.08.)

DAILY PM01 OUTPUT MESSAGE

2.07 The daily plant measurement data in the PM01 output message is organized as follows:

- Base measurements on certain categories (Fig. 2)
- Selected customer service measurements (Fig. 2)
- Maintenance measurements including emergency action (EA), maintenance interrupts, and network failures (Fig. 3)
- Performance measurements of system hardware including the central processor and bus system (Fig. 4)
- Coded enable peripheral units, peripheral units, and trunk and service circuits (Fig. 5)
- Other measurements (Fig. 5)
- Time-out totals (Fig. 5)
- Attached processor measurements (Fig. 6)
- Circuit switched digital capability (CSDC) measurements (Fig. 7)
- ◗Improved public telephone service (IPTS) measurements (Fig. 8)◖
- Remote Switching System (RSS) measurements (Fig. 9).

A. Base Measurements

2.08 The base measurements provided by PPMP1A00 are needed to normalize the service counts and performance counts of units whose uses vary with the traffic load. By using these counts, meaningful comparisons can be made with past performance and with the performance of offices with dissimilar traffic characteristics. The counts are taken in terms of carried load (excluding all traffic overflows). The base measurements are as follows:

(1) Originating Calls (ORIG CALLS)—Count the number of customer receiver seizures for which at least one digit is received. This count includes partial dials (but not permanent signals) as well as additional parties added to a conference circuit. The PPMP1A00 obtains this count directly from the traffic measurements program.

(2) Incoming Calls (INC CALLS)—Count the total number of calls originating from trunks incoming from distant locations that seize an incoming register (and in the case of by-link, receive one digit). The PPMP1A00 obtains this count directly from the traffic measurements program.

(3) Outgoing Calls (OUTG CALLS)—Count the number of calls for which outpulsing is required and a transmitter is successfully seized.

(4) Coin Control Seizures (COIN CONTR SEIZ)—Count the number of times the coin control circuit is successfully connected to a coin line. This count will exceed coin line originations as the coin control circuit may be seized more than once during a call.

(5) Centralized Automatic Message Accounting Seizures (CAMA SEIZ)—Count the number of times an incoming CAMA trunk (operator or ANI) is seized.

(6) Automatic Message Accounting Entries (AMA ENTRIES)—Count the number of billing entries put on AMA tape.

(7) Automatic Identification Outward Dialing Seizures (AIOD SEIZ)—Count the number of successful connections to an AIOD receiver.

(8) Centrex Data Link Seizures (CTX DL SEIZ)—Count the number of connections to a centrex DL for transmission or reception of lamp and key orders. This is ***not*** a count of centrex calls.

(9) ◗Output Message Register (OMR SEIZ)—Count of the number of seizure output message registers.◖

B. Service Measurements

2.09 The service measurements give valid indications of the level of customer service. A count of the calls lost by the system, as the result of hardware malfunctions, is a significant measure of the influence of the condition of the central office hard-

ware on customer service. The following service measurements are provided:

(1) Hardware Lost Calls (HWR LOST CALLS)—The number of calls dropped when a trunk is suspected and is placed on the trunk maintenance list (TML) for diagnosis or when a network failure has occurred on the call.

(2) Hardware Lost Billing (HWR LOST BILLING)—Number of calls not billed because both AMAs are out of service (local, long distance, and special service calls are allowed to proceed without billing).

(3) Coin Control Failures (COIN CONTR FAILURES)—Count the number of stuck coin conditions and coin telephones served by the office which had coin relays that were out of limits. To determine the number of coin phones experiencing difficulties with coin relays or stuck coins, examine the CN02 output data for the office which is printed hourly. Also, the PM01 coin control failure data indicates the conditions during the previous 24 hours. The CN02 counts for a 24-hour period should be equal to the PM01 coin control failure counts.

(4) Automatic Identification Outward Dialing Special Billing Number Billing (AIOD SBN BILLING)—Counts the number of times the AIOD equipment fails to bill a local private branch exchange (PBX) number correctly.

(5) Dial Tone Speed Test (DTST) Delays—Count the number of times the customer has to wait an "excessive" length of time for the system to process the call because all trunks in the desired trunk group are busy or the system is overloaded, causing queuing for equipment. This count includes 3-second and 11-second delays.

Note: Maintenance personnel may find it necessary to suspend the running of the DTST, because in certain trouble conditions DTST may generate traffic that would interfere with maintenance activities. Extended or frequent use of this option is ***not*** recommended. To discourage unnecessary use of the DTST inhibit option, the PM01 output message will include a one-line comment alerting maintenance personnel as to its use. This information is printed only if the inhibit option is used.

(6) Centralized Automatic Message Accounting Lost Billing (CAMA LOST BILLING)—Counts the number of times a CAMA call is handled but, due to hardware failure, no AMA register is available which is necessary for charging.

(7) Centralized Automatic Message Accounting Automatic Number Identification Failures (CAMA ANI FAILURE)—Counts the number of calls for which ANI failure digit is received.

(8) Receiver Attachment Delay (RCVR ATT DELAY)—Number of times a receiver connection was not made in 4 seconds.

(9) Receiver Attachment Delay Recorder (RADR Inhibit Usage)—Number of 100-second intervals during which the RADR feature was inhibited.

(10) FALSE STARTS—Counts the number of times a receiver is seized and then abandoned with no digits dialed.

(11) ▶Output Message Register Failures (OMR SEIZ FAILURES).◀

C. Maintenance Measurements

2.10 A concise summary of maintenance measurements is given as follows:

- Emergency action
- Interrupts
- Network failures.

Emergency Action

2.11 The software EA phases may be initiated by any of the following sources:

- A failure by the system to answer an interject request
- An E-to-E cycle becoming excessive
- An E-to-E priority class frequency failure
- An excessive rate of interrupts
- Two successive data validation failures

- The time spent in a phase becoming excessive
- Aborting of a phase
- The request of a phase at the master control center (MCC).

2.12 The number of EA phases that are requested either automatically or manually are printed in the PM01 output message. Refer to AT&T Practice 231-368-001 for a detailed description of the EA phases and the audits that are associated with each phase.

Interrupts

2.13 The number of various maintenance interrupts provides a picture of nonroutine maintenance action taken by the system. These interrupts are generally not as serious as a higher order EA phase, but they do interrupt normal call processing to correct possible hardware problems. A count of these interrupts will give a good indication of the state of the system's equipment. The number of interrupts that occur are printed as part of the PM01 output message. Refer to AT&T Practice 231-368-001 for a detailed description of the maintenance interrupts.

> ***Note:*** The PM01 output message prints information that will call attention to any inhibiting of interrupts. This information is printed only if the inhibit option has been used during the day.

Network Failures

2.14 The network failure counts are provided to give an indication of how well the network is completing and terminating calls. ***Each time a network failure occurs in the system an "NT" output message is printed.*** The following network failure counts are printed as part of the PM01 output message:

- Supervisory scan failure (SUPF)
- False cross and ground test failure (FCGF)
- Ringing current failure (RC)
- Low-line resistance failure (LLR)
- Power cross test (PX)
- Restore verify failure count (RVFY)
- Showering line test failure (SHWL).
- Call cutoff failure (CO).

> ***Note:*** Refer to AT&T Practice 231-049-330 (Remreed) or 231-049-331 (Ferreed) for a detailed description of the network failures.

D. Performance Measurements

2.15 This portion of plant measurements provides maintenance personnel with a more descriptive picture of the performance of equipment in the central office. The data concerning the maintenance activity in the office is recorded for each type of unit to aid in locating the source of problems and determining the switching integrity of an office. These basic measurements are made:

- Out of service
- Trouble indications (TBL IND)
- Errors (ERR)
- Faults (LOC; NON-LOC).

2.16 Refer to Fig. 1 for the configuration of the basic performance measurements.

Out-of-Service Counts for Central Processor, Bus System, Coded Enable Peripheral Units, Peripheral Units, and Trunk and Service Circuits

2.17 Maintenance out-of-service counts are a measure of the availability of central office switching equipment. Measurements of troubles incurred in an office do not give any indication of the amount of equipment left unrepaired for long periods of time. The out-of-service counts will indicate either of the following conditions:

- Many units down during a short interval (this would also be reflected in trouble and error counts as well as customer service).
- A few units being left out of service for long periods of time.

2.18 Measurement of unit outage is done on a 100-second sampling basis of system status tables. Each time the program finds a unit out of service, it increments the appropriate counter by one, giving a measurement in terms of hundred unit seconds (CUS) of outage. Out-of-service counts are incremented as a result of routine diagnostic procedures.

2.19 The out-of-service counts for the nine central processor units are summed and printed out under normal business day (NBD) total. The bus system, coded enable peripheral units, and seven peripheral units likewise have their out-of-service counts summed under NBD total. If the office collection interval is other than the normal business hours, the above out-of-service counts will print out under abbreviated business day (ABD) total.

2.20 The out-of-service counts are kept for the items listed in Table A.

2.21 Busy hour out-of-service (BSY HR O/S) counts are made on all trunks. "Busy hours" is defined by the central office on the basis of peak traffic periods. Since the number of hours over which this count is taken may vary, the number of hours of "busy hours" is also printed as the last item of the trunk and service circuit counts in the PM01 output message.

Trouble Indications Counts for Bus System, Peripheral Units, and Trunk and Service Circuits

2.22 Trouble indications (TBL IND) refer to those items when the system associates a unit with a specific trouble condition. The ESS switch makes this association by entering a particular fault recognition program, making a TML entry, or printing a message that locates a suspected unit for further manual testing. The TBL INDs do not constitute proof that a faulty condition exists in a particular unit. These counts are used as a good indication that trouble does exist and serves as a pointer to the location at which the trouble was found.

2.23 Trunk and service circuit counts are counts of the number of times call processing or nonroutine maintenance programs attempt to put a trunk on the TML for diagnosis. These counts are incremented regardless of the outcome of the diagnostic or whether the diagnostic was run. The only exception is that entries to the TML, as a result of a time-out, will be counted as a TBL IND only if:

- The trunk subsequently fails diagnosis or
- Initial examination indicates a possible fault (revertive trunks).

This is done to avoid counting traffic overload and maintenance problems external to the office as a trouble within the office.

2.24 Trouble indications are printed for the units listed in Table B.

Error Counts for Central Processor, Bus System, Coded Enable Peripheral Units, and Peripheral Units

2.25 Error (ERR) counts are printed for all units that maintain such counts. The ERR counts supply information about the trouble activity of the unit that is not already provided in "trouble indications." An error is defined as a malfunction within the machine that either cannot be reproduced utilizing available program control or can easily be corrected without altering normal operation. A retry failure after an error, where provided, will not be counted as a second error, but in some cases will cause an interrupt and, consequently, a plant interrupt count to be incremented. Error counts are printed for the units listed in Table C.

Fault Counts for Central Processor and Peripheral Units

2.26 Faults refer to specific problems due to hardware failures. There are two types of faults in 1A ESS switch:

- Located faults—Fault conditions which are automatically resolved to an equipment unit.
- Nonlocated faults—Fault conditions which are not automatically resolved to an equipment unit.

Fault counts are printed for the units listed in Table D.

TABLE A

OUT OF SERVICE COUNTS

EQUIPMENT GROUP	OUT OF SERVICE COUNTS
Central Processor	Central Control (CC) Program Store (PS) Call Store (CS) Master Control Console (MCC) File Store (FS) (for non-APS offices only) Attached Processor Interface (API) [for Attached Processor System (APS) office only] Data Unit Selector (DUS) Disk File (DF) (for non-APS offices only) Tape Unit Controller (TUC) Power Distribution Frame (PDF) Normal Business Day Total (NBD TOT) Abbreviated Business Day Total (ABD TOT)
Peripheral Units	Call Store Bus (CS Bus) Program Store Bus (PS Bus) Auxiliary Unit Bus (AU Bus) Coded Enable/Peripheral Unit Bus (CE/PUB) Peripheral Unit Address Bus (PUA Bus) Central Pulse Distributor Bus (CPDB) Scanner Answer Bus (SCAB) Normal Business Day Total (NBD TOT) Abbreviated Business Day Total (ABD TOT) I/O Unit Selector (IOUS) I/O Unit Channel (IOUC) Central Pulse Distributor (CPD) Scanner Network and Signal Distributor Controller (NET & SD) Automatic Identified Outward Dialing (AIOD) Centrex Data Link (CTX DL) Peripheral Unit Controller (PUC) PUC Data Link (PUCDL) Data Terminal Frame (DTF) Data Terminal (DTRM) Intelligent Simplex Peripheral Interface (ISPI) Controller
Trunk and Service Circuits	Outgoing Trunks (OGT) Incoming Trunks (ICT) Two-Way Trunks (2WAY TRKS) Originating Receivers (OR) Incoming Receivers (IR) Transmitters (XTMR) Miscellaneous Trunks (MISC)

TABLE B

TROUBLE INDICATION COUNTS

EQUIPMENT	TROUBLE INDICATION COUNTS
Peripheral Units	Peripheral Unit Bus (PUB) — Counts the number of times a PUB fails the CPD fault recognition program. The CPD fault recognition program is entered after an F-level interrupt. Central Pulse Distributor Bus (CPD Bus). Scanner Answer Bus (SCAB). Central Pulse Distributor (CPD) — Counts the entries to the CPD fault recognition from the F-level interrupt filter program that resulted in suspecting CPD trouble. Scanner — Counts the entries to the scanner fault recognition from an F-level interrupt. Network and Signal Distributor Controller (NET & SD) — Counts the entries to the network and signal distributor fault recognition because of an unable verify failure. Automatic Message Accounting (AMA) — Counts the entries to this unit's fault recognition. Automatic Identified Outward Dialing (AIOD) — Counts the number of automatic requests for AIOD diagnosis because equipment is suspect. Centrex Data Link (CTX DL) — Counts the number of times a link fails to retransmit an order five consecutive times or the number of errors on a link becomes excessive, and a diagnosis program is called to correct the problem. Peripheral Unit Controller Data Link (PUCDL). Data Terminal Frame (DTF). Data Terminal (DTRM).
Trunk and Service Circuits	Outgoing Trunks (OGT). Incoming Trunks (ICT). Two-Way Trunks (2WY TRKS). Originating Receivers (OR). Incoming Receivers (IR). Transmitters (XTMR). Miscellaneous Trunks (MISC TRKS) — This count includes TML entries of all trunks (not listed above).

TABLE C

ERROR COUNTS

EQUIPMENT GROUP	ERROR COUNTS
Central Processor	Central Control (CC) Program Store (PS) — Counts both single and double errors. Single errors are parity or hamming code errors which can be corrected without a reread. A double error is a word with two or more bit errors and must be reread. Also included in the count of double errors are single bit errors in the program store address and all-seems-well (ASW) failures from program store. These likewise require a reread. A reread failure will cause an E-level interrupt. Call Store (CS) — Counts the number of CS parity failures requiring a CS reread. Should the reread fail, a D-level interrupt is initiated. Master Control Center (MCC) File Store (FS) (for non-APS offices only) Data Unit Selector (DUS) Disk File (DF) (for non-APS offices only) Tape Unit Controller (TUC) Power Distribution Frame (PDF)
Peripheral Units	Call Store Bus Program Store Bus Auxiliary Unit Bus Coded Enable/Peripheral Unit Bus I/O Unit Selector I/O Unit Channel Network and Signal Distributor (NET & SD) — Counts the number of times that network or signal distributor peripheral controller orders were executed correctly, under control of the fault recognition program, after having failed on the initial attempt by the I/O program. Miscellaneous Peripheral Unit (MISC PU) — Counts the number of times the F-level filter program is entered, but finds no reproducible problem. The CP01 ERR message will also be printed in this situation. Automatic Identified Outward Dialing (AIOD) — Two counts of errors are kept on the AIOD system to distinguish between those errors caused by the AIOD hardware and those caused by the PBX automatic number identification (ANI) hardware on customer premise. The AIOD errors consist of shift register errors (invalid 2-out-of-5 codes in the shift register). The ANI errors include ANI parity errors which indicate that an invalid 2-out-of-5-code was detected in the ANI before the data was transmitted to the central office and ANI failure to respond condition which indicates that the ANI failed to send data once a receiver had been seized.

TABLE C (Contd)

ERROR COUNTS

EQUIPMENT GROUP	ERROR COUNTS
Peripheral Units (Contd)	Centrex Data Link (CTX DL) — Counts the number of times a data link fails to receive an ASW signal from a centrex console control cabinet after two consecutive attempts to transmit data, or receives an illegal key signal from a console. After each transmission of a lamp order to a centrex console, the data link waits for an ASW signal. If this signal is not received, a retransmission is made. If the data link fails to receive the ASW signal the second time, an error is counted. If five consecutive attempts fail using various CPD-PUB configurations, a trouble indication is counted, the link is turned off, and a diagnostic is requested. Key signals generated by the customer centrex console are checked for validity as they are received on the data link. The plant measurements error counter is incremented whenever an illegal signal is received. Thirty-two illegal key signals or nonconsecutive ASW failures on lamp orders within 4 minutes cause the trouble indications counter to be incremented and the data link to be removed from service for diagnosis. Periperal Unit Controller (PUC) — Counts PUC frame-detected errors in orders to the frame. The PUC error count is pegged when first trial fails and second trial succeeds. Intelligent Simplex Peripheral Interface (ISPI) Controller

E. Other Measurements and Time-Out Totals

2.27 Some additional counts are included in plant measurements that do not fit into any specific category. These counts are:

- The number of working trunks in the office
- The number of automatic progression tests run
- The number of disable-automatic processor configurations.
- The number of override configurations which have been activated (1A ESS switch)
- The individual time-out totals for incoming and outgoing trunks and also partial dials and preempts.

If the number of trunks count is different from the office records, this may indicate that some trunks have been moved into trunk group zero (a nonassigned trunk group). The count of automatic progression tests is printed to insure that these lengthy diagnostic tests are run on a continuing basis.

2.28 The number of disable-automatic processor configurations is a count of the number of times the processor switched from a faulty unit to its duplicate, correctly operating unit. The count of activated override configurations indicates the number of times a faulty unit is manually switched to its duplicate, correctly operating unit.

F. Attached Processor Measurements

2.29 The measurements for the APS are defined as follows:

(1) REQUESTS ACCEPTED (Base Measurements)—Count of the number of client requests accepted.

TABLE D

FAULT COUNTS

EQUIPMENT GROUP	FAULT COUNTS
Central Processor	Central Control (located; nonlocated) Program Store (located; nonlocated) Call Store (located; nonlocated) Master Control Center (located; nonlocated) File Store (located; nonlocated) (for non-APS offices only) Attached Processor Interface (located; nonlocated) (for APS offices only) Data Unit Selector (located; nonlocated) Disk File (located; nonlocated) (for non-APS offices only) Tape Unit Controller (located; nonlocated) Power Distribution Frame (located; nonlocated)
Bus System and Peripheral Units	Call Store Bus (located; nonlocated) Program Store Bus (located; nonlocated) Auxiliary Unit Bus (located; nonlocated) Coded Enable/Peripheral Unit Bus (located; nonlocated) I/O Unit Selector (located; nonlocated) I/O Unit Channel (located; nonlocated) Peripheral Unit Controller (PUC FAULT) — Count of PUC frame-detected faults in orders to the frame Intelligent Simplex Peripheral Interface (ISPI) Controller

(2) REQUESTS FAILED (Performance Measurements)—Count of the number of client requests that failed.

(3) API out of service (Performance Measurements)—Count of the number of API units that are out of service.

(4) TBL IND (Performance Measurements)—Count of the number of API units that enters the fault state.

(5) ERR (Performance Measurements)—Count of the number of API unit errors.

(6) API-PIC TBL IND (Performance Measurements)—Count of the number of API-peripheral interface controllers (PIC) that enters the fault state.

(7) D-LEVEL INTERRUPTS—The number of times an API causes an in-range or out-of-range D-level interrupt.

(8) CALL STORE (CS) ACCESS FAILURES—The number of times API access to CS results in an in-range or out-of-range failure.

(9) PROGRAM STORE (PS) ACCESS FAILURES—Reflects the number of times API access to PS results in an in-range or out-of-range failure.

(10) MAINTENANCE INTERJECTS—The number of times an API causes a maintenance interject.

(11) API DIAGNOSTICS RUN—The number of times API manual diagnostics or automatic diagnostics is run.

(12) ATP—The number of API manual diagnostics or automatic diagnostics runs that were All Tests Pass (ATP).

G. Circuit Switched Digital Capability Measurements

2.30 The measurements for CSDC are defined as follows.

Note: The term public switched digital capability (PSDC) is now known as CSDC.

Base Measurements

2.31 The following base counts are provided for CSDC calls.

(1) The CSDC originating calls (PSDC ORIG CALLS)—The number of line seizures which can be identified as CSDC call attempts.

(2) The CSDC incoming calls (PSDC INC CALLS)—The number of CSDC calls originating from trunks incoming form distant locations that seize an incoming register.

Note: Trunk diagnostics peg the incoming calls counts three (3) times.

(3) The CSDC tandem calls (PSDC TAND CALLS)—The number of incoming CSDC calls for which outpulsing is required and a transmitter is successfully seized.

Service Measurements

2.32 Only one CSDC count is provided for plant service measurements.

- The CSDC hardware lost calls (PSDC HWR LC)—The number of CSDC calls dropped when a trunk is suspected and is placed on the TML for diagnosis or when a network failure has occurred on the call.

Performance Measurements

2.33 The following performance measurements are provided for CSDC.

(1) The CSDC clock unit interface out of service (PSDC CLK INTF O/S)—The number of hundred call seconds (CCS) that the clock interface is unavailable.

Note: No other count is administered during an interface failure.

(2) The CSDC clock unit out of service (PSDC CLK O/S)—The number of CCS that the office clock unit is functioning in the holdover, or fast start mode of operation.

(3) The CSDC clock unit trouble indications (PSDC CLK TBL)—The incidence of the following alarm conditions will increment this count:

- Power Failure
- Synchronizer 0 failure
- Synchronizer 1 failure
- Composite clock generator 0 failure
- Phase lock loop 0 end-of-range
- Phase lock loop 1 end-of-range
- Line driver unit failure.

(4) The CSDC synchronization out of service (PSDC SYNC O/S)—The number of CCS that the back-up synchronization reference is in use. This count indicates that period of time when the synchronization reference is unduplicated.

(5) The CSDC synchronization trouble indications (PSDC SYNC TBL)—The incidence of the following alarm conditions will increment this count:

- Misframe alarm—primary synchronization reference
- Misframe alarm—back-up synchronization reference.

(6) The CSDC trunks trouble indications (PSDC TRK TBL)—The number of trouble indications associated with CSDC trunks.

(7) The CSDC trunks out of service (PSDC TRK O/S)—The number of CCSs that CSDC trunks are out of service.

(8) The CSDC trunks busy hour out of service (PSDC TRK BSY HR O/S)—The number of CCS that CSDC trunks are out of service during the busy hour.

(9) The CSDC loops trouble indications (PSDC LOOP TBL)—The number of CSDC loops which fail automatic tests generated by the CSDC maintenance circuit.

(10) The CSDC loop tests (PSDC LOOP TESTS)—The number of CSDC loops tested automatically by the CSDC maintenance circuit.

2.34 The following counts are included for all CSDC digital carrier trunk (DCT) frames. These counts are part of the peripheral units performance measurements of the PM01 output message.

- CSDC DCT Slips (PSDC DCT SLP)—The total number of slips on all T1 trunks terminating on the switching system.
- CSDC DCT Misframes (PSDC DCT MIS)—The total number of misframes on all T1 trunks terminating on the switching system.

H. Improved Public Telephone Service Measurements

2.35 The IPTS feature (1AE9 and later) requires plant measurments that deal specifically with problems concerning coin detection in public phones. Refer to AT&T Practice 231-390-109 for details.

2.36 The IPTS measurements are shown in Fig. 8. These measurements (counts) are incremented whenever the initial rate presence test or coin presence test differs from the rate tone test.

I. Remote Switching System (RSS) Measurements

2.37 The RSS host offices require additional plant measurements which provide performance data necessary to implement a controlled maintenance plan which includes the remote terminals and data links (DLs). These measurements are added to the daily plant measurements printout (PM01 output message) for the host offices. Multiple remote terminals are listed separately in the printouts and identified by terminal number.

2.38 The measurements for the RSS are defined as follows:

(1) Initializations-low (INIT LOW)—Count of low-level microprocessor initializations (levels 1 through 3) indicates occurrences of possible loss of transient calls and, in level 3, emergency audits and initializations of some memory locations.

(2) Initializations-transient (INIT TRN)—Count of the level 4 initializations which clear transient calls.

(3) Initializations-stable clear (INIT STB)—Count of the number of initializations resulting in loss of transient and stable calls (levels 5 and 6).

(4) Microprocessor controller automatic removals (MPC AUTO RMV)—Count of the number of automatic removals from service of a microprocessor controller.

(5) Microprocessors out of service (MPC O/S)—A 100-second out-of-service measurement when the off-line microprocessor controller is out of service, excluding automatic removals for diagnostics.

(6) Memory error (MEM ERR)—Count of the number of detected mismatches between on-line and off-line memories.

(7) Fanout board automatic removal (FO AUTO RMV)—Count of the number of automatic removals from service of fanout boards.

(8) Peripheral unit access troubles (PU ACC TBL)—Count of peripheral unit access troubles as determined by failure to access the periphery from both microprocessors.

(9) Peripheral unit errors (PU ERR)—Count of all occurrences of failures to access the periphery from either microprocessor, but not both.

(10) Routine exercise troubles (REX TBL)—Count of the number of troubles encountered in the automatic running of the routine exercises.

(11) Audit errors (AUDIT ERR)—The number of errors detected by data base and hardware audits.

(12) Remote order buffer troubles (ROB TBL)—Count of the number of occurrences of troubles encountered in the execution of an order in the remote order buffer.

(13) Network troubles (NTWK TBL)—Count of the number of detected network troubles including half-path continuity, half-path cross, and junctor troubles.

(14) Universal service circuit troubles (USC TBL)—The number of detected troubles in

universal service circuits including metallic access, USC, and USC voltage troubles.

(15) Channel troubles (CHNL TBL)—Count of the number of channel troubles as detected by either the host or the remote terminal.

(16) Originating calls (ORIG CALL)—Count of the number of originations reported to the host from a remote terminal.

(17) Terminating calls (TERM CALL)—Count of the number of ringing orders from the host to a remote terminal.

J. AUTOPLEX™ System 100

2.39 The vehicles for displaying the AUTOPLEX System 100 measurements involved are the PM01 and PM05 output messages.

2.40 The PM01 output message will contain the same counts as any other 1A ESS switch. These counts, however, will describe the volume of mobile activity and the state of the hardware connecting the mobile activity and the state of the hardware connecting the mobile telephone switching office (MTSO) and the cell sites.

2.41 The PM05 output message summarizes the cell site equipment performance. One output message will print for each operational cell in the office. The PM05 has two possible formats. The first format will be printed for all equipped cells which are able to send the plant measurement counts to the MTSO. The second format will be printed whenever two-way communications are not possible. (See Fig. 11.)

2.42 The counts used to evaluate the cell site hardware deficiencies are listed below:

(1) Cell site controllers out-of-service time (CSCO/S).

(2) Cell site controllers trouble indications (CSCTBL).

(3) Data links out-of-service time (DLO/S).

(4) Data links trouble indications (DLTBL).

(5) Set-up radios out-of-service time (SUO/S).

(6) Set-up radios trouble indications (SUTBL).

(7) Location radios out-of-service time (LCO/S).

(8) Location radios trouble indications (LCTBL).

(9) Voice-channel groups out-of-service time (RCO/S).

(10) Voice-channel groups trouble indications (RCTBL).

(11) Test groups out-of-service time (TGO/S).

(12) Test groups trouble indications (TGTBL).

(13) Routine audit failures (AUDF).

(14) Single process purge phases (SPP).

(15) Transient clear phases (TC).

(16) Stable clear phases (SC).

(17) Bootstrap request phases (BSR).

(18) Peripheral error analysis and recovery message received (PEAR).

(19) Assert count (ASERT).

(20) Cell controller manual removals to out of service (CSCMAN).

(21) Routine diagnostic failures (RDF).

(22) Initialization completions (INCMP).

The number of counts representing the out-of-service time for the voice radio, set-up radio, locate radio, test functional groups, and cell controller functional groups represents intervals of 100 second (36 counts per hour).

CARRIER INTERCONNECT MEASUREMENTS

2.43 The CI plant measurements are provided for generic programs 1AE8 and later.

2.44 The PM04 output message displays the interexchange carrier (IEC)/international carrier (INC) counts associated with the CI plant measurements.

2.45 The PM04 output message has two versions, the standard version and the continuation version. The purpose of the continuation version is to print the remaining IEC/INC counts in the event that plant measurements get forced off as a maintenance control (MAC) client. If an abort occurs during the printing of the PM04 output message, the continuation version (PM04 CONTINUED) will start printing with count lines beginning with the first IEC/INC whose counts have not been fully printed. (See Fig. 12.)

2.46 The IEC/INC counts are defined as follows:

(1) Direct incoming attempts (INCATT)—The number of calls originating from trunks incoming directly from an IEC/INC to an office that seizes an incoming register.

(2) Direct outgoing attempts (OUTATT)—The number of calls outgoing from an office directly to an IEC/INC for which outpulsing is required and a transmitter is successfully seized.

(3) Direct incoming machine detected interoffice irregularity (MDIIs) (INCMDII)—The number of calls that time-out where the calls originate from trunks incoming directly from an IEC/INC to an office that has seized an incoming register.

(4) Direct outgoing MDIIs (OUTMDII)—The number of calls that time-out where the calls are outgoing from an office to an IEC/INC for which outpulsing is required and a transmitter is successfully seized.

(5) Tandem outgoing attempts (TOUTATT)—The number of calls outgoing from an office to an IEC/INC over trunks used in the tandem arrangement for which outpulsing is required and a transmitter is successfully seized.

(6) Tandem outgoing set-up MDIIs (TSUMDII)—The number of failures occurring in setting up the connection to the access tandem (AT) office and time-outs at the end office access trunk arrangement (EOATA) awaiting an off-hook or start pulsing wink from the AT.

(7) Tandem outgoing other MDIIs (TICMDII)—The number of all other time-outs that occur on trunks used in the tandem arrangement including time-out waiting for acknowledgment wink from the IEC/INC excepting those time-outs already being counted for tandem outgoing set-up MDIIs.

MONTHLY PM02 OUTPUT MESSAGE

2.47 The monthly plant measurements summary is designed as a general overview of the performance of a central office. The monthly counts will be printed out automatically each month on the 23rd of the month immediately following the daily printout. The monthly counts are printed out in the PM02 output message (Fig. 10). The organization of the data follows the basic approach of the daily printout (PM01 output message). The PM02 output message is organized as follows:

Service Affecting Data

- Base Measurements
- Service Measurements.

Maintenance Measurements

- Emergency Action
- Interrupts.

Performance Measurements

- Central Processor
- Bus System
- Coded Enable Peripheral Units
- Peripheral System
- Trunk and Service Circuits
- Time-out Totals.

Detailed descriptions of the various counts may be found in paragraphs 2.08 through 2.28. Counts included as part of the PM02 output message are as follows:

Base Measurements

- Originating Calls
- Incoming Calls

- Outgoing Calls
- Centralized Automatic Message Accounting Seizures
- Coin Control Seizures
- Automatic Message Accounting Entries
- Automatic Identified Outward Dialing Seizures
- Centrex D-L Seizures.

Service Measurements

- Hardware Lost Calls
- Hardware Lost Billing
- Coin Control Failures
- Automatic Identified Outward Dialing Special Billing Number
- Dial Tone Speed Test Delays
- Centralized Automatic Message Accounting Seizure Lost Billing
- Centralized Automatic Message Accounting Automatic Number Identification Failures
- Receiver Attachment Delays
- Receiver Attachment Delay Recorder Inhibit Usage
- Dial Tone Speed Test Inhibit Usage
- False Starts.

Emergency Action

- Data Validation Failures
- EA Phase 1
- EA Phase 4
- EA Phase 5
- EA Phase 6.

Interrupts

- A-Level:RC Clear
- A-Level:Total
- B-Level
- C-Level
- D-Level
- E-Level
- F-Level
- Inhibit Usage.

Central Processor

- Errors
- Located Faults
- Nonlocated Faults
- Out of Service.

Note: The above counts are summed over all the central processing units in the central office (CC, PS, CS, MCC, API, FS, DF, DUS, TUC, and PDF).

Bus System

- Errors
- Located Faults
- Nonlocated Faults
- Out of Service.

Note: The above counts are summed over the CSB, PSB, AUB, and CE/PUB.

- Trouble Indications
- Out of Service.

Note: The above counts are summed over the PUA BUS, the CPD bus, and the SCAB.

Coded Enable Peripheral Units

- Errors
- Located Faults
- Nonlocated Faults
- Out of service.

Note: The above counts are summed over the I/O unit selector and the I/O unit channel.

Peripheral System

- Out of Service
- Trouble Indications.

Note: The above counts are summed over all peripheral units (CPD, scanners, NET&SD, AIOD, and centrex DL).

- Network (NET) Failures.

Note: The above counts are summed over all the NET failures (SUPF + FCGF + RC + LLR + PX + RVFY + SHWL). In addition, (SUPF + FCGF) and RVFY are listed separately for office edification.

Trunk and Service Circuits

- Out of Service on Outgoing, Incoming, and Two-way Trunks
- Trouble Indications on Outgoing, Incoming, and Two-way Trunks
- Out of Service on all other Trunks and Service Circuits
- Trouble Indications on all other Trunks and Service Circuits
- Incoming Receiver Time-outs
- Partial Dials
- Transmitter Time-outs
- Preempts.

Time-out Totals

- Incoming Trunks
- Partial Dials
- Outgoing Trunks
- Preempts.

Attached Processor Measurements

- Base Measurements
- Performance Measurements
- API Caused Events.

PROGRAM INTERFACES

2.48 Plant measurements require the insertion of counts in a large number of programs. Routines to increment a given counter are added to tabulate occurrences of selected phenomena. This is accomplished by the use of macros of varying length, so that the incrementing of a PPMP1A00 counter can be easily recognized in a listing. Programs that contain these routines include the fault recognition programs for CC, PS, CPD, signal distributor, scanner, network controller, AMA, and trunks. Count routines are also inserted in the Maintenance Control Program, the Traffic Measurements Program, and the Interrupt Recovery (IREC) Program.

PM03/PM05 OUTPUT MESSAGE RESPONSE TO PLNT-MEAS INPUT MESSAGE

2.49 In addition to the daily and monthly printouts, PPMP1A00 counts are available to central office maintenance personnel upon manual request. ***Caution: Once the plant measurements printout is begun, no high-priority message may seize the terminal until all data is printed; therefore, maintenance personnel should not request the plant measurement printout during peak traffic periods.*** During any trouble condition experienced by the system, maintenance personnel can request specific daily or monthly counts from any channel by the use of the PLNT-MEAS-aaa. input message, where:

aaa = DBS (Daily Base and Service Counts)

= DCS (Daily AUTOPLEX System 100 Cell Site Counts)

= DEI (Daily EA and Interrupt Counts)

= DNT (Daily Network Failure Counts)

= DCP (Daily Central Processor Counts)

= DPU (Daily Peripheral Unit Counts)

= DTK (Daily Trunk and Service Circuit Counts)

= DOT (Daily Other Measurements)

= DTO (Daily Time-outs by Destination)

= DPS (Daily Circuit Switched Digital Capability Counts)

= DRS (Daily Remote Switching System Counts)

= DAP (Daily APS Counts) (for APS offices only)

= ◗DPT (Daily Improved Public Telephone Service Counts)◖

= MBS (Monthly Base and Service Counts)

= MEI (Monthly EA and Interrupt Counts)

= MPF [Monthly Performance Counts (includes central processor, peripheral, and trunk and service circuit sections)].

= MAP (Monthly APS Counts) (for APS offices only).

2.50 The PLNT-MEAS-DCS. input message triggers the PM05 output message (Fig. 29). All other PLNT-MEAS-aaa. input messages trigger the PM03 output message. The format for the PM03 output message is as follows:

PM03
aaa-aaa PLANT MEASUREMENTS-bbb COUNTS
ććć
...
...

aaa-aaa = Office identification number (the area code and the office NNX code).

bbb = Section of data requested.

ććć = Blank (daily counts requested).

= DATA OVER__DAYS (monthly counts requested). The underscore will be replaced by the number of days of data included in the counts.

Examples of PM03 messages are shown in Fig. 13 through Fig. 28.

2.51 Care must be exercised in the interpretation of the counts printed in the PM03/PM05 output message because not all counts are totally representative of the events in the system at any one time. Several of the counts are incremented only quarter-hourly or hourly. The PM03/PM05 output message is provided only to give maintenance personnel a general picture of the operation of the system. The counts are ***not*** zeroed after a manual printout request.

PROTECTION OF PLANT MEASUREMENTS

2.52 Counts maintained by the Plant Measurements Program are stored in an area of CS that is protected from initialization by any EA phase. This protection is provided for PPMP1A00 counts because it is under such severe conditions that the plant measurements may be of the most value in reporting on the reliability of the system. Some of the counts will be inaccurate after an EA phase 4 and higher because counts not yet transferred to the plant registers will be zeroed.

2.53 To protect the plant measurements counts in the event of a high priority message, all counts are printed directly from CS. ***Caution: Once the plant measurements printout is begun, no high priority message may seize the terminal until all data is printed.*** If output is heavy when PPMP1A00 attempts to make its entry, the printout will be printed at the earliest time possible. Under these conditions, the counts may have been incremented after the normal 2:30 a.m. time.

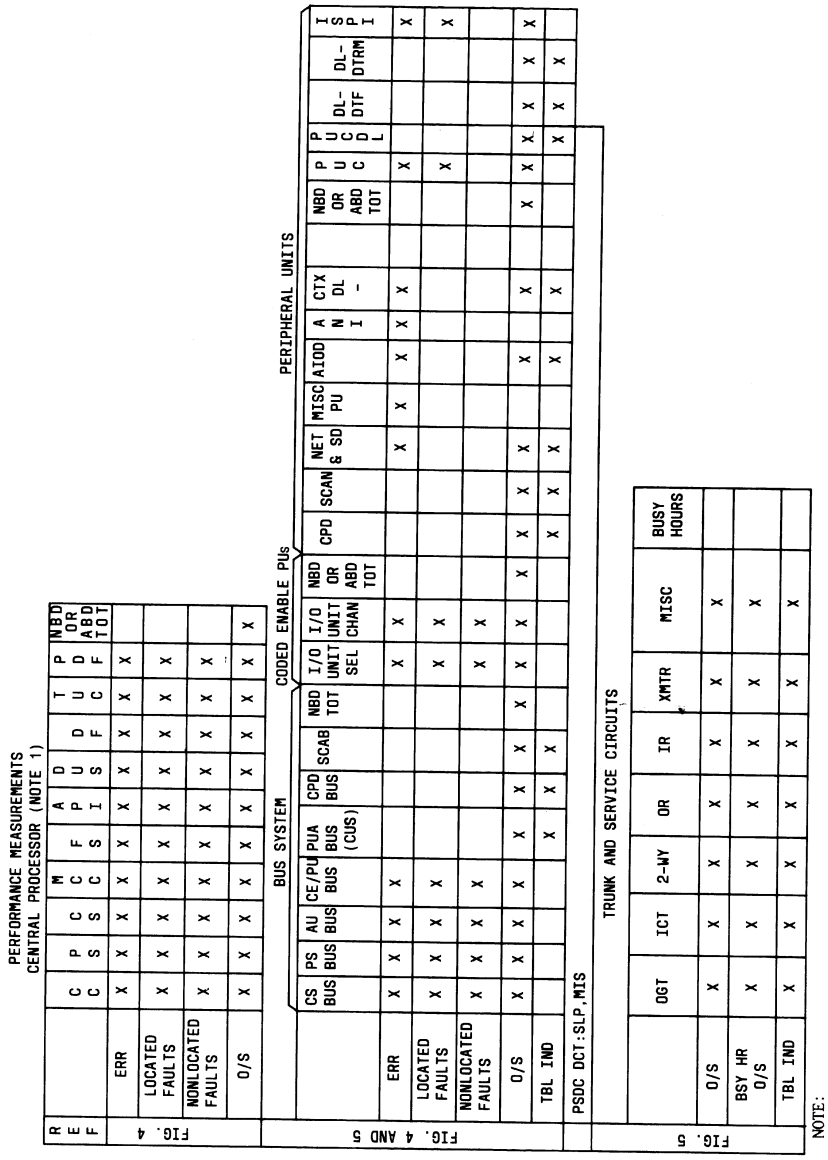
3. GLOSSARY OF ABBREVIATIONS AND ACRONYMS

3.01 Abbreviations and acronyms used in this practice are listed below.

ABD	Abbreviated Business Day
AIOD	Automatic Identification Outward Dialing
AMA	Automatic Message Accounting
ANI	Automatic Number Identification
API	Attached Processor Interface
APS	Attached Processor System
ASW	All-Seems-Well
AT	Access Tandem
ATP	All Tests Pass
BSR	Bootstrap Request
BSY HR O/S	Busy Hour Out of Service
CAMA	Centralized Automatic Message Accounting
CC	Central Control
CCS	Hundred Call Seconds
CI	Carrier Interconnect (Feature)
CLK	Clock
CO	Call Cutoff Failure
CONTR	Controller
CPD	Central Pulse Distributor
CPDB	Control Pulse Distributor Bus
CS	Call Store
CSC	Cell Site Controller
CSDC	Circuit Switched Digital Capability (Feature)
CTX DL	Centrex Data Link
CUS	Hundred Unit Seconds
DCT	Digital Carrier Trunk
DF	Disk File
DL	Data Link
DTF	Data Terminal Frame
DTRM	Data Terminal
DTST	Dial Tone Speed Test
DUS	Data Unit Selector
EA	Emergency Action
EOATA	End Office Access Trunk Arrangement
ERR	Error
FCGF	False Cross and Ground Test Failure
FS	File Store
HWR	Hardware
ICT	Incoming Trunk
IEC	Interexchange Carrier
INC	International Carrier
INCMP	Initialization Complete
INTF	Interface
I/O	Input/Output
◗IPTS	Improved Public Telephone Service (Feature)◖
IR	Incoming Receiver
IREC	Interrupt Recovery
◗ISPI	Intelligent Simplex Peripheral Interface (Feature)◖

LASS	Local Area Signaling Services (Feature)
LC	Last Calls
LLR	Low Line Resistance (or leakage) Test
MAC	Maintenance Control
MCC	Master Control Center
MDII	Machine Detected Interoffice Irregularity
MIS	Misframe
MISC	Miscellaneous
MTSO	Mobile Telephone Switching Office
NET & SD	Network and Signal Distributor
NBD	Normal Business Day
OGT	Outgoing Trunk
OMR	Output Message Register
OR	Originating Receivers
ORIG	Originating
OUTG	Outgoing
PBX	Private Branch Exchange
PDF	Power Distribution Frame
PEAR	Peripheral Error Analysis and Recovery
PIC	Peripheral Interface Controller
PLNT-MEAS	Plant Measurement
PM01	Daily Plant Measurement Output Message
PM02	Monthly Plant Measurement Output Message
PM03	Daily or Monthly Counts per Manual Request
PM04	Carrier Interconnect Plant Measurement Output Message
PM05	Advance Mobile Phone Service Plant Measurement Output Message
PPMP1A00	Plant Measurement Program
PS	Program Store
PSDC	Public Switched Digital Capability (Feature)
PUA BUS	Peripheral Unit Address Bus
PUB	Peripheral Unit Bus
PUC	Peripheral Unit Controller
PUCDL	Peripheral Unit Controller Data Link
PX	Power Cross Test
RADR	Receiver Attachment Delay Recorder
RC	Ringing Current Failure
RCO/S	Voice-Channel Groups Out of Service
RCTBL	Voice-Channel Groups Trouble Indications
RDF	Routine Diagnostic Failure
RCVR ATT	Receiver Attachment
RSS	Remote Switching System
RVFY	Restore Verify Failure Count
SBN	Special Billing Number
SC	Stable Clear
SCAB	Scanner Answer Bus

SEIZ	Seizures
SHWL	Showering Line Test Failure
SLP	Slips
SPP	Single Process Purge
SUPF	Supervisory Scan Failure
SYNC	Synchronization
TAND	Tandem
TBL	Trouble
TBL IND	Trouble Indicators
TC	Transient Clear
TG	Test Group
TGN	Trunk Group Number
TML	Trunk Maintenance List
TRK	Trunk
TUC	Tape Unit Controller
XTMR	Transmitters
2WY	Two-Way Trunk.



NOTE:
1. For an APS office, the FS and DF counts will be removed and the API counts will be added. For a non-APS office, the FS and DF counts will remain, but the API counts are not included.

Fig. 1—Configuration of the Basic Performance Measurements

```
V                    6        5        4        3        2        1
PM01
312-124 PLANT MEASUREMENTS SUMMARY (NOTE 1)
MON
4/12/1982

     SERVICE AFFECTING DATA


     BASE MEASUREMENTS
  2    ORIG CALLS
  1    INC CALLS
  0    OUTG CALLS
  0    COIN CONTR SEIZ
  0    OMR SEIZ
 34    CAMA SEIZ
  0    AMA ENTRIES
  0    AIOD SEIZ
  0    CTX D-L SEIZ

     SERVICE MEASUREMENTS
  0    HWR LOST CALLS
  0    HWR LOST BILLING
  0    COIN CONTR FAILURES
  0    AIOD-SBN BILLING
  0    DTST DELAYS
  0    CAMA LOST BILLING
  0    CAMA ANI FAILURES
  0    RCVR ATT DELAYS
  0    RADR INHIBIT USAGE
  2    FALSE STARTS
  0    OMR SEIZ FAILURES

NOTE:
 1. The 312-124 equals the area code and office code, respectively.
```

Fig. 2—The Base and Service Measurements of the PM01 Output Message

```
V                    6        5        4        3        2        1
312-124
MON
4/12/1982

      MAINT MEASUREMENTS
        EMERGENCY ACTION:
   0      DV01
   0      PH1 AUTO
   1           MAN
   0      PH4 AUTO
   0           MAN
   0      PH5 AUTO
   0           MAN
   1      PH6 MAN

      INTERRUPTS:
   0      A:TOTAL
   0      A:OTHER
   0      A:RECENT CHANGE
   0      B:TOTAL
   1      B:HWREA
   0      B:IN RANGE
   0      B:OUT OF RANGE
   0      B:CC SWITCH
   0      C:TOTAL
   0      D:TOTAL
   0      D:CS IN RANGE
   0      D:API IN RANGE◄— (APS OFFICES ONLY)
   0      D:FS IN RANGE◄— (NON-APS OFFICES ONLY)
   0      D:DUS IN RANGE
   0      D:STK RELATED
   0      D:INVALID TRANSFER TO CS
   0      D:PROTECTED AREA
   0      D:OUT OT RANGE
   0      D:AU OUT OF RANGE
   0      E:TOTAL
   0      E:IN RANGE
   0      E:OUT OF RANGE
   0      F:TOTAL

      NET FAILURES:
   0      SUPF
   0      FCGF
   0      RC
   0      LLR
   0      PX
   0      RVFY
   0      SHWL
   0      CO
```

Fig. 3—The Maintenance Measurements of the PM01 Output Message

```
V                                   6        5        4        3        2        1
312-124
MON
4/12/82

     PERFORMANCE MEASUREMENTS
       CENTRAL PROCESSOR
    12 CC          ERR
     0             LOC FAULTS
     0             NON-LOC FAULTS
     0             O/S
     2 PS          ERR
     0             LOC FAULTS
     0             NON-LOC FAULTS
     0             O/S
     0 CS          ERR
     0             LOC FAULTS
     0             NON-LOC FAULTS
     0             O/S
     0 MCC         ERR
     0             LOC FAULTS
     0             NON-LOC FAULTS
     0             O/S
     0 FS          ERR              } NON-APS
     0             LOC FAULTS       } OFFICES ONLY
     0             NON-LOC FAULTS   }
    10             O/S              }
     0 API         ERR              } APS OFFICES
     0             LOC FAULTS       } ONLY
     0             NON-LOC FAULTS   }
     0             O/S              }
     0 DUS         ERR
     0             LOC FAULTS
     0             NON-LOC FAULTS
     0             O/S
     0 DFU         ERR              } NON-APS
     0             LOC FAULTS       } OFFICES ONLY
     0             NON-LOC FAULTS   }
     0             O/S              }
    50 TUC         ERR
     0             LOC FAULTS
     0             NON-LOC FAULTS
     0             O/S
     0 PDF         ERR
     0             LOC FAULTS
     0             NON-LOC FAULTS
     0             O/S
     0 NBD TOT     O/S
     0 ABD TOT     O/S <--ALTERNATE FORM OF NBD TOT

       BUS SYSTEM

     0 CSB         ERR
     0             LOC FAULTS
     0             NON-LOC FAULTS
     0             O/S
     0 PSB         ERR
     0             LOC FAULTS
     0             NON-LOC FAULTS
     0             O/S
     0 AUB         ERR
     0             LOC FAULTS
     0             NON-LOC FAULTS
     0             O/S
     0 CE/PUB      ERR
     0             LOC FAULTS
     0             NON-LOC FAULTS
     0             O/S
     0 PUAB        O/S
     0             TBL IND
     0 CPDB        O/S
     0             TBL IND
     0 SCAB        O/S
     0             TBL IND
     0 NBD TOT     O/S
     0 ABD TOT     O/S <-- ALTERNATE FORM
                           OF NBD TOT
```

Fig. 4—The Central Processor and Bus System Performance Measurements of the PM01 Output Message

```
V                                   6       5       4       3       2       1
312-124
MON
4/12/1982

     CODED ENABLE PERIPHERAL UNITS

     0 IOUS        ERR
     0             LOC FAULTS
     0             NON-LOC FAULTS
     0             O/S
     0 IOUC        ERR
     0             LOC FAULTS
     0             NON-LOC FAULTS
    30             O/S
     0 NBD TOT     O/S
     0 ABD TOT     O/S  <-- ALTERNATE FORM OF NBD TOT

       PERIPHERAL UNITS

     2 CPD         O/S
     0             TBL IND
     6 SCANNER     O/S
     0             TBL IND
     0 NET&SD      O/S
     0             TBL IND
     0             ERR
     0 MISC PU     ERR
     0 AMA         O/S
     0             TBL IND
     0             ERR
     0 AIOD        O/S
     0             TBL IND
     0             ERR
     0             ANI ERR
     0 CTX D-L     O/S
     0             TBL IND
     0             ERR
     0 PUC FRAME   O/S
     0 PUC FAULT
     0 PUC ERROR
     0 PUCDL       O/S
     0 PUCDL       TBL IND
   101 PSDC        DCT SLP
   102 PSDC        DCT MIS
     0 DL-DTF      O/S
     0             TBL IND   CCIS - DL FEATURE
     0 DL-DTRM     O/S       (OPTIONAL)
     0             TBL IND
     1 ISPI        O/S
     0 ISPI        ERR
     0 ISPI        FAULT
     0 NBD TOT     O/S
     0 ABD TOT <-- ALTERNATE FORM OF NBD TOT

       TRUNK & SERVICE CIRCUITS

    78 OGT         O/S
    19             BSY HR O/S
     8             TBL IND
     0 ICT         O/S
     0             BSY HR O/S
     3             TBL IND
     0 2WY         O/S
     0             BSY HR O/S
     0             TBL IND
     0 OR          O/S
     0             BSY HR O/S
     0             TBL IND
     0 IR          O/S
    15             BSY HR O/S
     0             TBL IND
     4 XMTR        O/S
     0             BSY HR O/S
     0             TBL IND
     3 MISC        O/S
     2             BSY HR O/S
     0             TBL IND
     1 BUSY HOURS


       OTHER MEASUREMENTS

        TRUNK MEAS

   653    TRUNKS IN OFFICE
     0    AUTO PROG TESTS
    19    DISABLE AUTO PC
     1    ACTIVATE OVERRIDE

       TIMEOUT TOTALS
    17 ICT
     0 PD
     1 OGT
     2 PRMT

       TIMEOUTS BY OFFICE CODE
ICT/PD    OGT/PRMT    OFFICE
 1/0        0/0         15
 0/2        0/0         16
(An asterisk * in one of the
above columns indicates that
overflow has occurred in one
of the counters.)
```

Fig. 5—The Peripheral Units Performance Measurements, Trunk and Service Circuits Measurements, Other Measurements, and Time-out Totals of the PM01 Output Message

```
V                          6       5       4       3       2       1
312-124
WED
5/1/1985

                          ATTACHED PROCESSOR MEASUREMENTS

                                    BASE MEASUREMENTS
REQUESTS ACCEPTED                         0

                                    PERFORMANCE MEASUREMENTS
REQUESTS FAILED                           0
API O/S                                   0
    TBL IND                               0
    ERR                                   0
API-PIC TBL IND                           0

API CAUSED EVENTS:                  TOTAL   IN RANGE   OUT OF RANGE
D-LEVEL INTERRUPTS                    0         0           0
CALL STORE ACCESS FAILURES            0         0           0
PROGRAM STORE ACCESS FAILURES         0         0           0
MAINTENANCE INTERJECTS                0

                                    MANUAL  AUTOMATIC
API DIAGNOSTICS RUN                   0         0
                ATP                   0         0
```

Fig. 6—Example of the Attached Processor Measurements of the PM01 Output Message

```
V          6         5         4         3         2         1
312-124
MON
4/12/1982
           PUBLIC SWITCHED DIGITAL CAPABILITY
           MEASUREMENTS
     7     PSDC ORIG CALLS
     6     PSDC INC CALLS
   103     PSDC TAND CALLS
   104     PSDC LOOP TESTS
   105     PSDC LOOP TBL
     1     PSDC HWR LC
     3     PSDC CLK INTF O/S
   106     PSDC CLK O/S
   107     PSDC CLK TBL
   108     PSDC SYNC O/S
   109     PSDC SYNC TBL
     2     PSDC TRK TBL
    43     PSDC TRK O/S
    21     PSDC TRK BSY HR O/S
```

Fig. 7—The Circuit Switched Digital Capability Measurements of the PM01 Output Message

```
V          6         5         4         3         2         1
609-229
FRI
2/20/1984
           IMPROVED PUBLIC TELEPHONE SERVICE
           MEASUREMENTS
   0       IPTS CN04 FAIL1
   0       IPTS CN04 FAIL2
   0       IPTS CN04 FAIL3
   0       IPTS CN04 FAIL4
   0       IPTS CN04 FAIL5
   0       IPTS CN04 FAIL6
   0       IPTS CN04 FAIL7
   0       IPTS CN04 FAIL8
   0       IPTS CN04 FAIL9
```

Fig. 8—The Improved Public Telephone Service Measurements of the PM01 Output Message

```
V                    6       5       4       3       2       1
312-124
MON
4/12/1982
          REMOTE SWITCHING SYS
          MEASUREMENTS
          RSS NO. 1
    0     INIT LOW
  513     INIT TRN
    1     INIT STB
    3     MPC AUTO RMV
  829     MPC O/S
    2     MEM ERR
    2     FO AUTO RMV
  770     PU ACC TBL
    0     PU ERR
    3     REX TBL
  770     AUDIT ERR
    0     ROB TBL
    2     NTWK TBL
  768     USC TBL
    0     CHNL TBL
    5     ORIG CALL
  770     TERM CALL
```

Fig. 9—Example of the Remote Switching System Measurements of the PM01 Output Message

```
V                          6       5       4       3       2       1
312-124
WED
1/23/85
          PLANT MEASUREMENTS MONTHLY SUMMARY
          DATA OVER 20 DAYS

             BASE MEASUREMENTS
        4       ORIG CALLS
       11       INC CALLS
        0       OUTG CALLS
      112       CAMA SEIZ
        1       COIN CONTR SEIZ
        0       AMA ENTRIES
        0       AIOD SEIZ
       36       CTX D-L SEIZ

             SERVICE MEAUSREMENTS
        0       HWR LOST CALLS
        0       HWR LOST BILLING
        0       COIN CONTR FAILURES
        0       AIOD SBN BILLING
        0       DTST DELAYS
        0       CAMA LOST BILLING
        0       CAMA ANI FAILURE
     4128       RCVR ATT DELAY
   528416       RADR INHIBIT USAGE
        0       DTST INHIBIT USAGE
        0       FALSE STARTS

             MAINT MEASUREMENTS
              EMERGENCY ACTION:
        0       DV01
        0       PH1
        X       PH4
        0       PH5
        2       PH6

             INTERRUPTS:
        0       A:RC CLEAR
        1       A:TOTAL
        0       B
        0       C
        0       D
        0       E
        1       F
        0       INHIBIT USAGE
```

Fig. 10—Example of the Monthly PM02 Output Message (Sheet 1 of 3)

```
V                    6       5       4       3       2       1
312-124
WED                                                  APS OFFICES ONLY
1/23/85                                                      NON-APS OFFICES ONLY
                CENTRAL PROCESSOR
          0        UNIT ERRORS: (CC + PS + MCC + API + FS + DF + DUS + TUC + PDF)
          0        LOC FAULTS:
          0        NON-LOC FAULTS:
        227        O/S:

                BUS SYSTEM
          0        UNIT ERRORS: (CSB + PSB + AUB + CEPUB)
          0        LOC FAULTS:
          0        NON-LOC FAULTS
         61        O/S:
          0        TBL IND: (PUAB + CPDB + SCAB)
          1        O/S:

                CODED ENABLE PERIPHERAL UNITS
          0        UNIT ERRORS: (IOUS + IOUC)
          0        LOC FAULTS
          0        NON-LOC FAULTS:
          0        O/S:

                PERIPHERAL SYSTEM
         53        O/S: (CPD + SCAN + NET + SD + AIOD + CTX D-L)
          3        TBL IND:
          0        NET FAILURES: (SUPF + FCGF + RC + LLR + PX + RVFY + SHWL)
          0        NET FAILURES: (SUPF + FCGF)
          0        NET FAILURES: (RVFY)

                TRUNK AND SERVICE CIRCUITS
         31        O/S: (OGT + ICT + 2WY)
          0        TBL IND: (OGT + ICT + 2WY)
          0        O/S: (OR + IR + XMTR + MISC)
          1        TBL IND: (OR + IR + XMTR + MISC)
          0        IR TIMEOUTS
          0        PARTIAL DIALS
          0        XMTR TIMEOUTS
          0        PRE-EMPTS

               TIMEOUT TOTALS
          0        ICT
          0        PD
          0        OGT
          0        PRMT
```

Fig. 10—Example of the Monthly PM02 Output Message (Sheet 2 of 3)

```
V                    6       5       4       3       2       1
312-124
WED
1/23/85
                    ATTACHED PROCESSOR MEASUREMENTS

                                BASE MEASUREMENTS
REQUESTS ACCEPTED                       0

                            PERFORMANCE MEASUREMENTS
REQUESTS FAILED                         0
API O/S                                 0
    TBL IND                             0
    ERR                                 0
API-PIC TBL IND                         0

API CAUSED EVENTS:
                                TOTAL  IN RANGE  OUT OF RANGE
D-LEVEL INTERRUPTS                      0       0           0
CALL STORE ACCESS FAILURES              0       0           0
PROGRAM STORE ACCESS FAILURES           0       0           0
MAINTENANCE INTERJECTS                  0

                                MANUAL  AUTOMATIC
API DIAGNOSTICS RUN                     0       0
                ATP                     0       0
```

Fig. 10—Example of the Monthly PM02 Output Message (Sheet 3 of 3)

Format 1:

```
PM05
      609-267 PLANT MEASUREMENTS SUMMARY
      SAT
      10/30/1982
          ADVANCED MOBILE PHONE SERVICE (NOTE 1)
          MEASUREMENTS
          CELL SITE NO. 1
    CSCO/S CSCTBL  DLO/S  DLTBL  SUO/S  SUTBL  LCO/S  LCTBL  RCO/S
        10     12     13    201     14     19     16     18     19
    RCTBL   TGO/S TGTBL  AUDF    SPP    TC     SC     BSR    PEAR
       21      22     31    25     27     28     32     32     33
    ASERT  CSCMAN  RDF    INCMP
       34      36     7      39
```

Format 2:

```
PM05
      609-267 PLANT MEASUREMENTS SUMMARY
      SAT
      10/30/1982
          ADVANCED MOBILE PHONE SERVICE (NOTE 1)
          MEASUREMENTS
          CELL SITE NO. 7
      COUNTS ARE NOT AVAILABLE.

NOTE
  1. AUTOPLEX System 100
```

Fig. 11—Example of the AUTOPLEX System 100 Measurements of the PM05 Output Message

SAMPLE "PM04" OUTPUT MESSAGE WITHOUT ABORT

```
PM04
312-123 PLANT MEASUREMENTS SUMMARY FOR IEC/INC
MON
9/17/1982

IEC/INC   INCATT  OUTATT INCMDII OUTMDII TOUTATT TSUMDII TICMDII
    2     123456  111111    2000    1000   12345     135      14
   14    1234567  876543     246     544  765432    6421      98
  889      33333    5555     444     642    5431     865     147
  ***      44444    6666     555     753    6542     976     258
(above line occurs only if error counts are not all zero)
  IEC/INC DATA PRINTOUT IS FINISHED
```

SAMPLE "PM04" OUTPUT MESSAGE WITH SINGLE ABORT

```
PM04
312-123 PLANT MEASUREMENTS SUMMARY FOR IEC/INC
MON
9/17/1982

IEC/INC   INCATT  OUTATT INCMDII OUTMDII TOUTATT TSUMDII TICMDII
    2     123456  111111    2000    1000   12345     135      14
   14    1234567  876543     246     544  765432    6421      98
  889      33333    5555     444     642    5431     865     147

PM04 CONTINUED
312-123 PLANT MEASUREMENTS SUMMARY FOR IEC/INC
MON
9/17/1982

IEC/INC   INCATT  OUTATT INCMDII OUTMDII TOUTATT TSUMDII TICMDII
  994     123456  111111    2000    1000   12345     135      14
  997    1234567  876543     246     544  765432    6421      98
  999      33333    5555     444     642    5431     865     147
  ***      44444    6666     555     753    6542     976     258
(above line occurs only if error counts are not all zero)
  IEC/INC DATA PRINTOUT IS FINISHED
```

Fig. 12—Example of the Carrier Interconnect Measurements of the PM04 Output Message

```
PLNT-MEAS-DBS.PF

PM03
312-123—PLANT MEASUREMENTS—DBS COUNTS
          BASE MEASUREMENTS
  1000      ORIG CALLS
  2050      INC CALLS
  1830      OUTG CALLS
     0      CAMA SEIZ
   870      COIN CONTR SEIZ
   234      OMR SEIZ
  1410      AMA ENTRIES
     0      AIOD SEIZ
   910      CTX D-L SEIZ
          SERVICE MEASUREMENTS
     0      HWR LOST CALLS
     0      HWR LOST BILLING
    20      COIN CONTR FAILURES
     0      AIOD SBN BILLING
     0      DTST DELAYS
     0      CAMA LOST BILLING
     0      CAMA ANI FAILURES
     1      RCVR ATT DELAY
     0      RADR INHIBIT USAGE
     0      FALSE STARTS
     2      OMR SEIZ FAILURES
```

Fig. 13—Example of the PM03 System Response to PLNT-MEAS-DBS Input Message

```
PLNT-MEAS-DEI.PF

PM03
609-222—PLANT MEASUREMENTS—DEI COUNTS

          MAINT MEASUREMENTS
           EMERGENCY ACTION:
     0       DV01
     0       PH1 AUTO
     0            MAN
     0       PH4 AUTO
     0            MAN
     0       PH5 AUTO
     0            MAN
     1       PH6 AUTO
     0       PH7 MAN

          INTERRUPTS
     0       A:TOTAL
     0       A:OTHER
     0       A:RC CLEAR
     0       B:TOTAL
     0       B:HWR EA
     0       B:IN RANGE
     0       B:OUT OF RANGE
     0       B:CC SWITCH
     0       C:TOTAL
     0       D:TOTAL
     0       D:CS IN RANGE
     0       D:API IN RANGE◄— (APS OFFICES ONLY)
     0       D:FS IN RANGE◄— (NON-APS OFFICES ONLY)
     0       D:DUS IN RANGE
     0       D:STACK RELATED
     0       D:INVALID TRANSFER TO CS
     0       D:PROTECTED AREA
     0       D:OUT OF RANGE
     0       D:AU OUT OF RANGE
     0       E:TOTAL
     0       E:IN RANGE PULSE SOURCE
     0       E:OUT OF RANGE PULSE SOURCE
     0       F:TOTAL
```

Fig. 14—Example of the PM03 System Response to PLNT-MEAS-DEI Input Message

```
PLNT-MEAS-DNT.PF

PM03
609-222—PLANT MEASUREMENTS—DNT COUNTS
          NET FAILURES:
     0        SUPF
     0        FCGF
     0        RC
     0        LLR
     0        PX
     0        RVFY
     0        SHWL
     0        CO
```

Fig. 15—Example of the PM03 System Response to PLNT-MEAS-DNT Input Message

```
PLNT-MEAS-DCP.PF

PM03
609-222—PLANT MEASUREMENTS—DCP COUNTS
          CENTRAL PROCESSOR
     12       CC      ERR
      0               LOC FAULTS
      0               NON-LOC FAULTS
      0               O/S
      2       PS      ERR
      0               LOC FAULTS
      0               NON-LOC FAULTS
      0               O/S
      0       CS      ERR
      0               LOC FAULTS
      0               NON-LOC FAULTS
      0               O/S
      0       MCC     ERR
      0               LOC FAULTS
      0               NON-LOC FAULTS
      0               O/S
      0       FS      ERR                 ⎫
      0               LOC FAULTS          ⎬ NON-APS OFFICES ONLY
      0               NON-LOC FAULTS      ⎪
      0               O/S                 ⎭
      0       API     ERR                 ⎫
      0               LOC FAULTS          ⎬ APS OFFICES ONLY
      0               NON-LOC FAULTS      ⎪
      0               O/S                 ⎭
      0       DUS     ERR
      0               LOC FAULTS
      0               NON-LOC FAULTS
      0               O/S
      0       DFU     ERR                 ⎫
      0               LOC FAULTS          ⎬ NON-APS OFFICES ONLY
      0               NON-LOC FAULTS      ⎪
      0               O/S                 ⎭
      0       TUC     ERR
      0               LOC FAULTS
      0               NON-LOC FAULTS
      0               O/S
      0       PDR     ERR
      0               LOC FAULTS
      0               NON-LOC FAULTS
      0               O/S
      0    NBD TOT    O/S
      0    ABD TOT    O/S ◄— ALTERNATE FORM
                             OF NBD TOT
```

Fig. 16—Example of the PM03 System Response to PLNT-MEAS-DCP Input Message

```
PLNT-MEAS-DPU.PF
PM03
609-222 - PLANT MEASUREMENTS - DPU COUNTS
      BUS SYSTEM
  0     CSB         ERR
  0                 LOC FAULTS
  0                 NON-LOC FAULTS
  0                 O/S
  0     PSB         ERR
  0                 LOC FAULTS
  0                 NON-LOC FAULTS
  0                 O/S
  0     AUB         ERR
  0                 LOC FAULTS
  0                 NON-LOC FAULTS
  0                 O/S
  0     CE/PUB      ERR
  0                 LOC FAULTS
  0                 NON-LOC FAULTS
  0                 O/S
  0     PUAB        O/S
  0                 TBL IND
  0     CPDB        O/S
  0                 TBL IND
  0     SCAB        O/S
  0                 TBL IND
  0     NBD TOT     O/S
  0     ABD TOT O/S <-- ALTERNATE FORM OF NBD TOT
    CODED ENABLE PERIPHERAL UNITS
  0     IOUS        ERR
  0                 LOC FAULTS
  0                 NON-LOC FAULTS
  0                 O/S
  0     IOUC        ERR
  0                 LOC FAULTS
  0                 NON-LOC FAULTS
  0                 O/S
  0     NBD TOT     O/S
  0     ABD TOT O/S <-- ALTERNATE FORM OF NBD TOT
    PERIPHERAL UNITS
  0     CPD         O/S
  0                 TBL IND
  0     SCANNER     O/S
  0                 TBL IND
  0     NET & SD    O/S
  0                 TBL IND
  0                 ERR

    PERIPHERAL UNITS (CONT)
  0     MISC PU     ERR
  0     AIOD        O/S
  0                 TBL IND
  0                 ERR
  0         ANI     ERR
  0     CTX D-L     O/S
  0                 TBL IND
  0                 ERR
  0     PUC FRAME O/S
  0     PUC FAULT
  0     PUC ERROR
  0     PUCDL       O/S
  0     PUCDL       TBL IND
  0     PSDC        DCT SLP
  0     PSDC        DCT MIS
  1     ISPI        O/S
  0     ISPI        ERR
  0     ISPI        FAULT
  0     NBD TOT     O/S
  0     ABD TOT O/S <-- ALTERNATE FORM OF NBD TOT
```

Fig. 17—Example of the PM03 System Response to PLNT-MEAS-DPU Input Message

```
PLNT-MEAS-DTK.PF

PM03
609-222—PLANT MEASUREMENTS—DTK COUNTS

      TRUNK & SERVICE CIRCUITS
 30     OGT        O/S
 20                BSY HR O/S
  0                TBL IND
 50     ICT        O/S
 30                BSY HR O/S
  0                TBL IND
 50     2WY        O/S
 30                BSY HR O/S
  0                TBL IND
  0     OR         O/S
  0                BSY HR O/S
  0                TBL IND
  0     IR         O/S
  0                BSY HR O/S
  1                TBL IND
  0     XMTR       O/S
  0                BSY HR O/S
  0                TBL IND
  0     MISC       O/S
  0                BSY HR O/S
  0                TBL IND
  1     BUSY HOURS
```

Fig. 18—Example of the PM03 System Response to PLNT-MEAS-DTK Input Message

```
PLNT-MEAS-DOT.PF

PM03
609-222—PLANT MEASUREMENTS—DOT COUNTS

          OTHER MEASUREMENTS
            TRUNK MEAS
  616         TRUNKS IN OFFICE
    0         AUTO PROG TESTS
   19         DISABLE AUTO PC
    1         ACTIVATE OVERRIDE
```

Fig. 19—Example of the PM03 System Response to PLNT-MEAS-DOT Input Message

```
PLNT-MEAS-DTO.PF

PM03
609-222 – PLANT MEASUREMENTS – DTO COUNTS

          TIMEOUT TOTALS
    1     ICT
    0     PD
    0     OGT
    0     PRMT
```

Fig. 20—Example of the PM03 System Response to PLNT-MEAS-DTO Input Message

```
PLNT-MEAS-DPS.PF

PM03
609-222
     SUN
     5/30/1982 - PLANT MEASUREMENTS - DPS COUNTS
                 PUBLIC SWITCHED DIGITAL CAPABILITY
                 MEASUREMENTS
           7     PSDC ORIG CALLS
           6     PSDC INC CALLS
         103     PSDC TAND CALLS
         104     PSDC LOOP TESTS
         105     PSDC LOOP TBL
           1     PSDC HWR LC
           3     PSDC CLK INTF O/S
         106     PSDC CLK O/S
         107     PSDC CLK TBL
         108     PSDC SYNC O/S
         109     PSDC SYNC TBL
           2     PSDC TRK TBL
          43     PSDC TRK O/S
          21     PSDC TRK BSY HR O/S
```

Fig. 21—Example of the PM03 System Response to PLNT-MEAS-DPS Input Message

```
PLNT-MEAS-DRS.PF

PM03
609-222 - PLANT MEASUREMENTS - DRS COUNTS
          REMOTE SWITCHING SYSTEM
           MEASUREMENTS
            RSS NO. 1
      0      INIT LOW
    513      INIT TRN
      1      INIT STB
      3      MPC AUTO RMV
    829      MPC O/S
      2      MEM ERR
      2      FO AUTO RMV
    770      PU ACC TBL
      0      PU ERR

      3      REX TBL
    770      AUDIT ERR
      0      ROB TBL
      2      NTWK TBL
    768      USC TBL
      0      CHNL TBL
      5      ORIG CALL
    770      TERM CALL
```

Fig. 22—Example of the PM03 System Response to PLNT-MEAS-DRS Input Message

```
PLNT-MEAS-DAP.PF

PM03
  609-222     PLANT MEASUREMENTS - DAP COUNTS
                ATTACHED PROCESSOR MEASUREMENTS
                                    BASE MEASUREMENTS
REQUESTS ACCEPTED                         0
                                    PERFORMANCE MEASUREMENTS
REQUESTS FAILED                           0
API O/S                                   0
    TBL IND                               0
    ERR                                   0
API-PIC TBL IND                           0
API CAUSED EVENTS:
                                    TOTAL   IN RANGE   OUT OF RANGE
D-LEVEL INTERRUPTS                    0        0           0
CALL STORE ACCESS FAILURES            0        0           0
PROGRAM STORE ACCESS FAILURES         0        0           0
MAINTENANCE INTERJECTS                0
                                    MANUAL   AUTOMATIC
API DIAGNOSTICS RUN                   0        0
                ATP                   0        0
```

Fig. 23—Example of the PM03 System Response to PLNT-MEAS-DAP Input Message

```
PLNT-MEAS-DPT.PF

PM03
609-222 - PLANT MEASUREMENTS - DPT COUNTS
      IMPROVED PUBLIC TELEPHONE SERVICE
      MEASUREMENTS
  0      IPTS       CN04 FAIL1
  0      IPTS       CN04 FAIL2
  0      IPTS       CN04 FAIL3
  0      IPTS       CN04 FAIL4
  0      IPTS       CN04 FAIL5
  0      IPTS       CN04 FAIL6
  0      IPTS       CN04 FAIL7
  0      IPTS       CN04 FAIL8
  0      IPTS       CN04 FAIL9
```

Fig. 24—Example of the PM03 System Response to PLNT-MEAS-DPT

```
PLNT-MEAS-MBS.PF

PM03
609-222 - PLANT MEASUREMENTS - MBS COUNTS

          DATA OVER 30 DAYS
          BASE MEASUREMENTS
     0     ORIG CALLS
     0     ING CALLS
     0     OUTG CALLS
     0     COIN CONTR SEIZ
     0     CAMA SEIZ
     0     AMA ENTRIES
     0     AIOD SEIZ
     0     CTX D-L SEIZ

          SERVICE MEASUREMENTS
     0     HWR LOST CALLS
     0     HWR LOST BILLING
     0     COIN CONTR FAILURES
     0     AIOD SBN BILLING
     0     DTST DELAYS
     0     CAMA LOST BILLING
     0     CAMA ANI FAILURES
     0     RCVR ATT DELAYS
     0     RADR INHIBIT USAGE
     0     FALSE STARTS
```

Fig. 25—Example of the PM03 System Response to PLNT-MEAS-MBS Input Message

```
PLNT-MEAS-MEI.PF

PM03
609-222 - PLANT MEASUREMENTS - MEI COUNTS

          DATA OVER 30 DAYS
          MAINT MEASUREMENTS
          EMERGENCY ACTION
     0       DV01
     0       PH1
     0       PH4
     0       PH5
     0       PH6

          INTERRUPTS:
     0       A:RC CLEAR
     0       A:TOTAL
     0       B
     0       C
     0       D
     0       E
     0       F
     0       INHIBIT USAGE
```

Fig. 26—Example of the PM03 System Response to PLNT-MEAS-MEI Input Message

```
PLNT-MEAS-MPF.PF
PM03                                                    APS OFFICES ONLY
609-222 - PLANT MEASUREMENTS - MPF COUNTS
                                                                NON-APS OFFICES ONLY
        DATA OVER 30 DAYS
        CENTRAL PROCESSOR
      0   UNIT ERRORS:(CC + PS + CS + MCC + API + FS + DF + DUS + TUC + PDF)
      0   LOC FAULTS:
      0   NON-LOC FAULTS:
    227   O/S:
        BUS SYSTEM
      0   UNIT ERRORS:(CSB + PSB + AUB + CEPUB)
      0   LOC FAULTS:
      0   NON-LOC FAULTS:
     61   O/S:
      0   TBL IND:(PUAB + CPDB + SCAB)
      1   O/S:
        CODED ENABLE PERIPHERAL UNITS
      0   UNIT ERRORS:(IOUS + IOUC)
      0   LOC FAULTS:
      0   NON-LOC FAULTS:
     46   O/S:
        PERIPHERAL SYSTEM
     53   O/S:(CPD + SCAN + NET + SD + AIOD + CTX D-L)
      3   TBL IND:
      0   NET FAILURES:(SUPF + FCGF + RC + LLR + PX + RVFY + SHWL)
      0   NET FAILURES:(SUPF + FCGF)
      0   NET FAILURES:(RVFY)
        TRUNK AND SERVICE CIRCUITS
     31   O/S:(OGT + ICT + 2WY)
      0   TBL IND:OGT + ICT + 2WY)
      0   O/S:(OR + IR + XMTR + MISC)
      1   TBL IND:(OR + IR + XMTR + MISC)
      0   IR TIMEOUTS
      0   PARTIAL DIALS
      0   XMTR TIMEOUTS
      0   PRE-EMPTS
        TIMEOUT TOTALS
      0   ICT
      0   PD
      0   OGT
      0   PRMT
```

Fig. 27—Example of the PM03 System Response to PLNT-MEAS-MPF Input Message

```
PLNT-MEAS-MAP.PF

PM03
609-222        PLANT MEASUREMENTS - MAP COUNTS
                    DATA OVER  0  DAYS
                         ATTACHED PROCESSOR MEASUREMENTS

                                    BASE MEASUREMENTS
                                          0
REQUESTS ACCEPTED
                                    PERFORMANCE MEASUREMENTS
                                          0
REQUESTS FAILED                           0
API O/S                                   0
    TBL IND                               0
    ERR                                   0
API-PIC TBL IND

API CAUSED EVENTS:                  TOTAL  IN RANGE  OUT OF RANGE
D-LEVEL INTERRUPTS                    0        0          0
CALL STORE ACCESS FAILURES            0        0          0
PROGRAM STORE ACCESS FAILURES         0        0          0
MAINTENANCE INTERJECTS                0

                                    MANUAL AUTOMATIC
API DIAGNOSTICS RUN                   0        0
                ATP                   0        0
```

Fig. 28—Example of the PM03 System Response to PLNT-MEAS-MAP Input Message

PLNT-MEAS-DCS. PF

Format 1:

```
PM05
      609-267 PLANT MEASUREMENTS SUMMARY
      SAT
      10/30/1982
          ADVANCED MOBILE PHONE SERVICE
          MEASUREMENTS
          CELL SITE NO. 1
     CSCO/S CSCTBL  DLO/S  DLTBL  SUO/S  SUTBL  LCO/S  LCTBL  RCO/S
         10     12     13    201     14     19     16     18     19
     RCTBL   TGO/S  TGTBL  AUDF    SPP    TC     SC     BSR    PEAR
        21     22     31    25     27     28     32     32     33
     ASERT  CSCMAN  RDF    INCMP
        34     36    7      39
```

Format 2:

```
PM05
      609-267 PLANT MEASUREMENTS SUMMARY
      SAT
      10/30/1982
          ADVANCED MOBILE PHONE SERVICE
          MEASUREMENTS
          CELL SITE NO. 7
      COUNTS ARE NOT AVAILABLE.
```

Fig. 29—Example of the PM05 System Response to PLNT-MEAS-DCS Input Message

Nortel DMS–100 TRK163 Trunk Maintenance Log

TRK163

Explanation

The Trunk Maintenance subsystem (TRK) generates log TRK163 when the system routes a local line call over an outgoing trunk to a line in a distant office. This office receives a Calling Line Identification (CLI) request.

Format

The log report format for TRK163 is as follows:

```
TRK163 mmmdd hh:mm:ss ssdd INFO CALLING LINE IDENT
   CALLING LEN = <len> DN = <dn>
   OUTGOING TRUNK = <trkid>
   CALLED DN = <dn>
   CALLID = <callid>
   TIME = mmmdd hh:mm:ss
```

Example

An example of log report TRK163 follows:

```
TRK163 APR01 12:00:00 2112 INFO CALLING LINE IDENT
   CALLING LEN = HOST 00 0 19 20 DN = 9093622001
   OUTGOING TRUNK = CKT RTP2W 1
   CALLED DN = 4811999
   CALLID = 123456
   TIME: APR01 12:00:00
```

Field Descriptions

The following table describes each field in the log report:

Field	Value	Description
INFO CALLING LINE IDENT	Constant	Indicates that the subsystem requests CLI for a call routed over an outgoing trunk.
CALLING DN <dn>	Integers	Provides originating line Directory Number (DN).
CALLING LEN <len>	Symbolic Text	Identifies originating Line Equipment Number (LEN) for lines connected to Line Module (LM) or Line Concentrating Module (LCM): **SITE FF B/M DD CC** * SITE: Frame location if remote LM or LCM (RLM or RLCM) are present. Otherwise, SITE = HOST. * B/M: LM bay or LCM module (0 or 1)

```
                                                * DD: LM drawer or LCM subgroup (00-31)

                                                * CC: Line card (00-31)
-------------------------------------------------------------------------------------------
OUTGOING TRUNK <trkid>       Symbolic Text    Provides the originating trunk equipment
                                              identification.
-------------------------------------------------------------------------------------------
CALLED DN <dn>               Integers         Provides terminating DN for the line at the
                                              distant office.
-------------------------------------------------------------------------------------------
CALLID <callid>              0-FFFFF          Provides number uniquely identifying the call.
-------------------------------------------------------------------------------------------
TIME                         mmmdd hh:mm:ss   Indicates the time the local line call was
                                              routed to a line in a distant office.
-------------------------------------------------------------------------------------------
-End-
```

Action: Save log report TRK163 for any department that requested CLI.

Associated OM Registers: There are no associated Operational Measurement (OM) registers.

Nortel DMS–100 TRK164 Trunk Maintenance Log

TRK164

Explanation

The Trunk Maintenance subsystem (TRK) generates log TRK164 when the system routes a call that originates from an external line through the office to a line in a distant office.

Format

The log report format for TRK164 is as follows:

```
TRK164 mmmdd hh:mm:ss ssdd INFO CALLING LINE IDENT
   INCOMING TRUNK = <trkid>
   OUTGOING TRUNK = <trkid>
   CALLED DN = <dn>
   CALLID = <callid>
```

Example

An example of log report TRK164 follows:

```
TRK164 APR01 12:00:00 2112 INFO CALLING LINE IDENT
   INCOMING TRUNK = CKT RTP2W 1
   OUTGOING TRUNK = CKT RTP2W 1
   CALLED DN = 4811999
   CALLID = 123456
```

Field Descriptions

The following table describes each field in the log report:

Field	Value	Description
INFO CALLING LINE IDENT	Constant	Indicates that the subsystem requests CLI for a call routed through the office.
INCOMING TRUNK <trkid>	Symbolic Text	Provides incoming trunk equipment identification.
OUTGOING TRUNK <trkid>	Symbolic Text	Provides outgoing trunk equipment identification.
CALLED DN <dn>	Integers	Provides terminating DN for the line at the distant office.
CALLID <callid>	0–FFFFF	Provides number uniquely identifying the call.

-End-

Action: Save log report TRK164 for any department that requested CLI.

Associated OM Registers: There are no associated Operational Measurement (OM) registers.

Triplett Volt Meter Battery Modification

Overview

Old Triplett high−voltage meters show up from time−to−time at various ham radio and electronics swap fests. These meters are very well constructed and are perfect for the amateur high−voltage enthusiast.

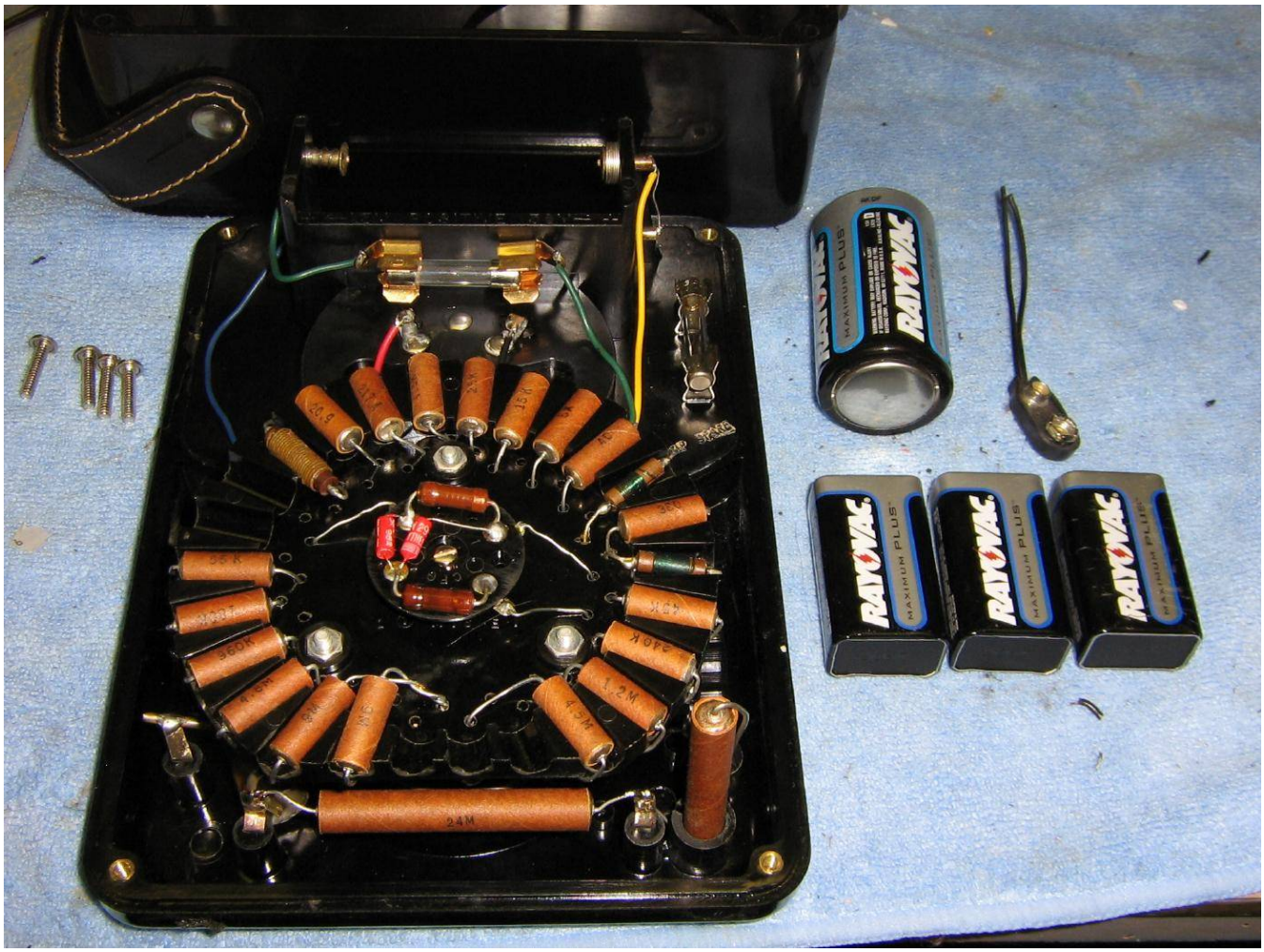
Provided that the actual analog meter movement is still intact and operational, the only real thing that will be wrong with these old meters are the internal batteries. Triplett meters used two internal batteries, one a common 1.5 volt "D" size and the other, a hard−to−find 30 volt battery.

Thankfully, there is a really easy solution for that 30 volt battery. It works by using three standard 9 volt batteries wired in series. This will give you around 27 volts, close enough to the required 30 volts.

The following pictures and descriptions will help to explain everything in a little more detail.

Pictures & Construction

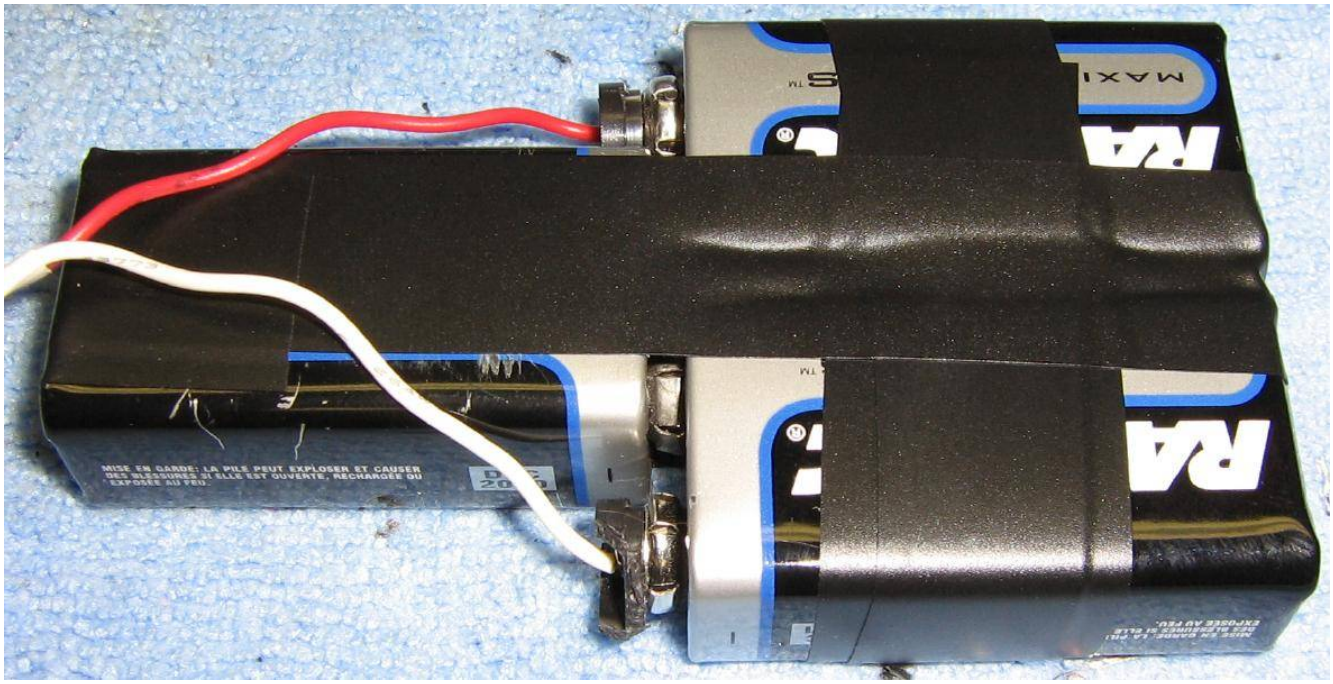
Triplett Model 630 AC/DC high−voltage meter in perfect shape. They go for around $30 (used) at various ham fests.



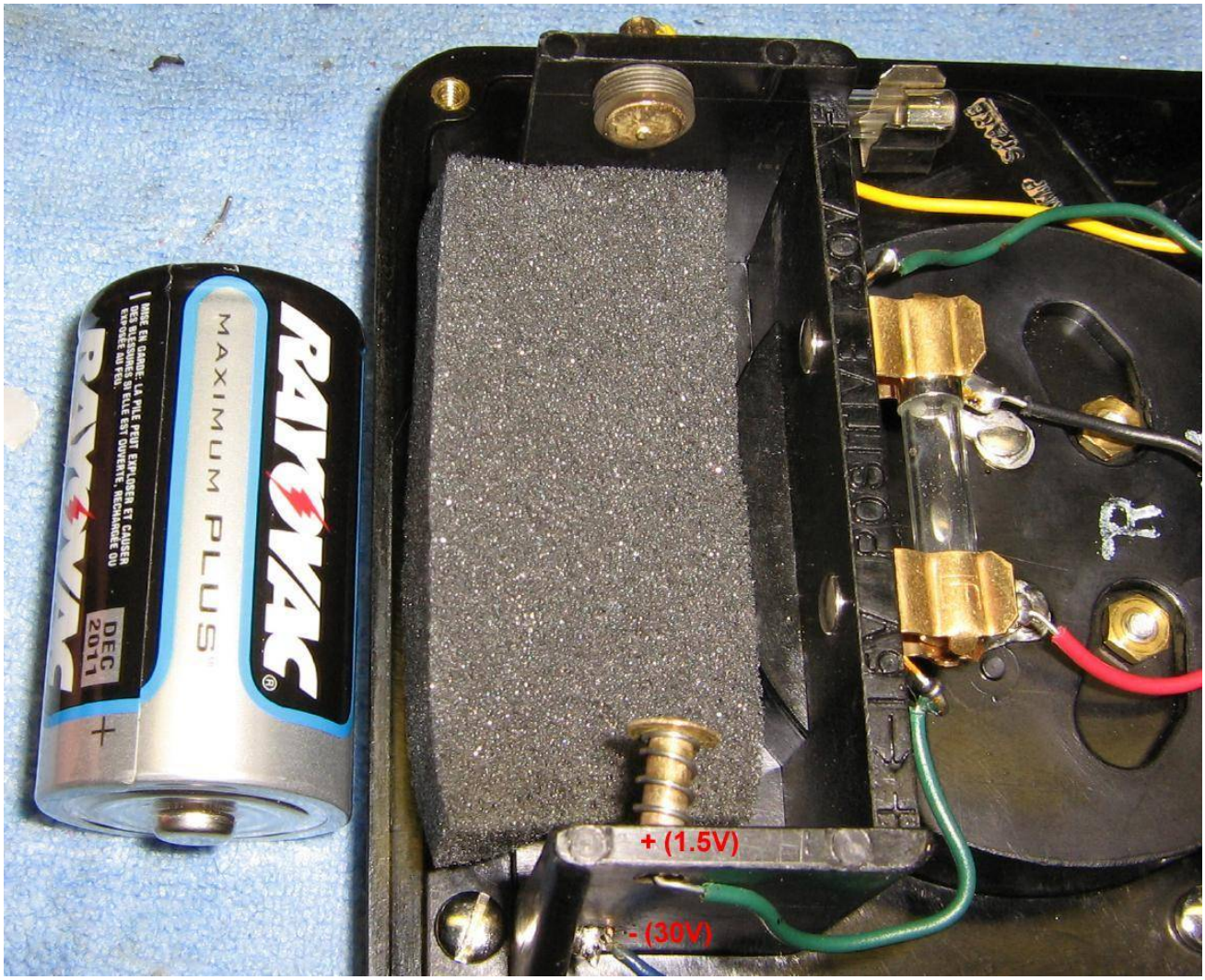
Internal view. Remove the four screws along the back panel and pull the two halves apart. This particular meter didn't have any batteries inside it.

On the right are the new batteries. You'll need one "D" size battery and three 9 volt batteries. You'll also need a 9 volt battery snap connector.

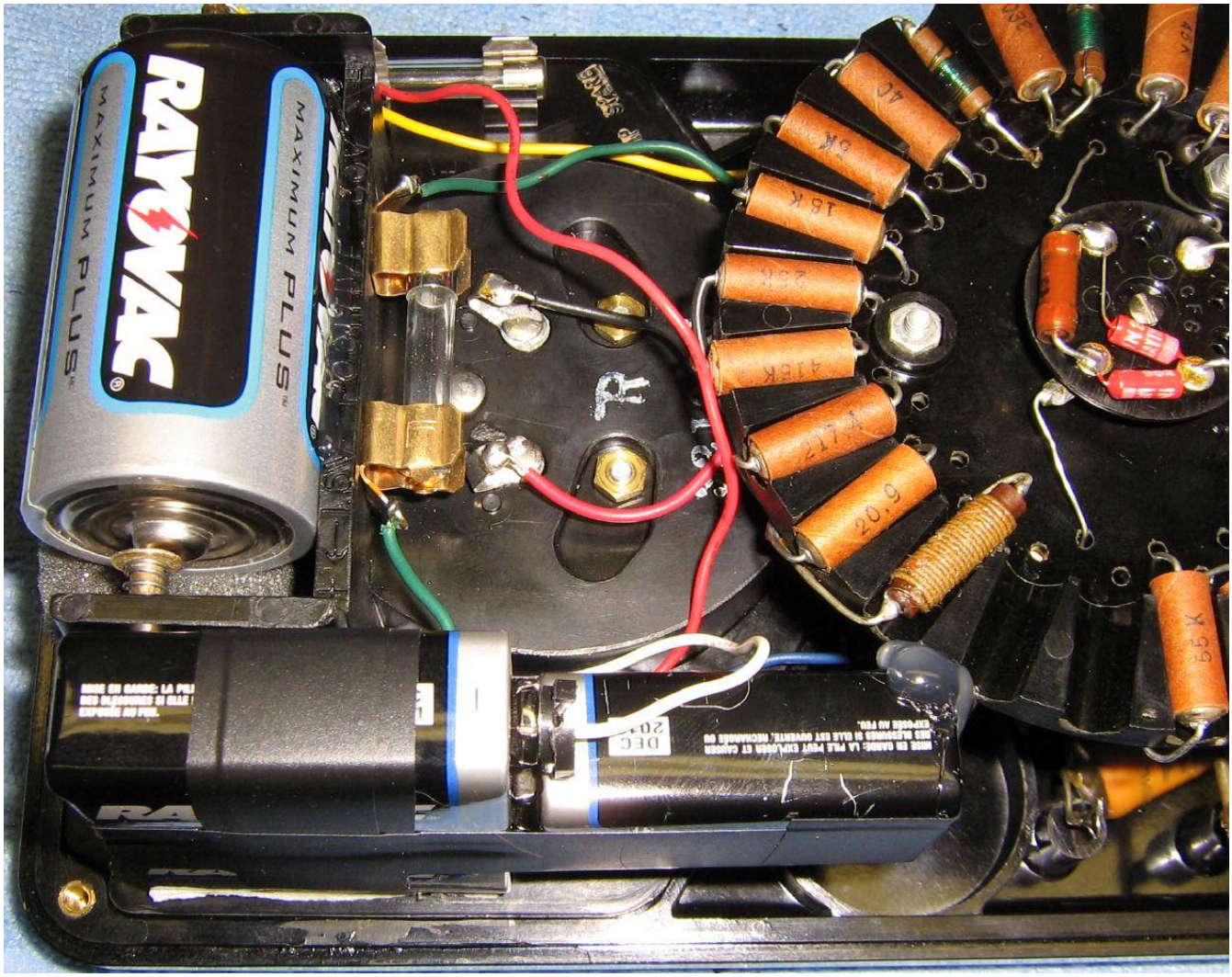
Arrange the three 9 volt batteries *in series* as shown in the above picture (you'll figure it out) and tape them together. Then cut the 9 volt battery snap connector in half.



Solder wires to the new snap connector tabs and place them onto the "new" battery terminals. Check the voltage on a meter to verify it is all working. It should measure around 27 volts and the batteries *should not* get hot. If they do, something is wrong.



The meter's original 30 volt battery was mounted underneath the 1.5 volt battery. You'll need to place a piece of foam under the new "D" battery so it can reach the top two battery tabs. The "D" battery's **POSITIVE** end will be on the left, when facing the rear of the meter.



Install the new 27 volt battery pack as shown. The **NEGATIVE** end should go to the solder tab below the "D" battery's **POSITIVE** connection and the **POSITIVE** end should go to the solder tab below the "D" battery's **NEGATIVE** connection. They are labeled, but it's a bit confusing.

Nortel DMS–100 Equipment Counts

EQPCOUNTS

The EQPCOUNTS command provides the following switch equipment counts:

- Nodes
- Networks
- Peripheral Modules
- Lines
- Trunks
- Station Features

This article describes each count and provides the Command Interpreter (CI) command string required to verify the count. Count descriptions are listed in the same order as they are output by the EQPCOUNT command. Note that the EQPCOUNTS output may not contain all the counts described.

EQPCOUNTS Output

The following is an example of the output report of command EQPCOUNTS. For Peripheral Modules (PM), the count indicates if the module is "Insv:" (in–service) or "Comm:" (commissioned and operational, but not yet in–service). If individual usage or performance reports are required for selected hardware, refer to the *Switch Performance Monitoring System Application Guide Manual*, NTP 297–1001–330.

Example of EQPCOUNTS Output

```
>DMSMON
DMSMON:
>EQPCOUNTS ALL

**********************
*       Counts       *
**********************

Number of nodes: 326
Number of networks: 20

Number of TM2 PMs:          Insv: 0     Comm: 1
Number of TM4 PMs:          Insv: 0     Comm: 1
Number of ATM PMs:          Insv: 0     Comm: 1
Number of TM8 PMs:          Insv: 0     Comm: 5
Number of MTM PMs:          Insv: 0     Comm: 12
Number of DCM PMs:          Insv: 0     Comm: 9
Number of OAU PMs:          Insv: 0     Comm: 1
Number of STM PMs:          Insv: 0     Comm: 2
Number of T8A PMs:          Insv: 0     Comm: 1
Number of TMA PMs:          Insv: 0     Comm: 0
Number of MTMA PMs:         Insv: 0     Comm: 0
Number of LM PMs:           Insv: 0     Comm: 4
Number of RSM PMs:          Insv: 0     Comm: 0
Number of TAN PMs:          Insv: 0     Comm: 1
Number of DES PMs:          Insv: 0     Comm: 1
Number of DSM PMs:          Insv: 0     Comm: 0
Number of DCM250 PMs:       Insv: 0     Comm: 0
Number of LGC PMs:          Insv: 0     Comm: 12
Number of LCM PMs:          Insv: 0     Comm: 60
```

```
Number of DTC PMs:          Insv: 0     Comm: 40
Number of MSB6 PMs:         Insv: 0     Comm: 0
Number of LTC PMs:          Insv: 0     Comm: 2
Number of SMR PMs:          Insv: 0     Comm: 2
Number of SMS PMs:          Insv: 0     Comm: 2
Number of SMU PMs:          Insv: 0     Comm: 1
Number of RCT PMs:          Insv: 0     Comm: 3
Number of MSB7 PMs:         Insv: 0     Comm: 5
Number of CSC PMs:          Insv: 0     Comm: 0
Number of RMM PMs:          Insv: 0     Comm: 3
Number of IDTC PMs:         Insv: 0     Comm: 0
Number of DCMT PMs:         Insv: 0     Comm: 0
Number of RCC PMs:          Insv: 0     Comm: 1
Number of RCS PMs:          Insv: 0     Comm: 4
Number of RCU PMs:          Insv: 0     Comm: 3
Number of ESA PMs:          Insv: 0     Comm: 1
Number of SVR PMs:          Insv: 0     Comm: 0
Number of ILGC PMs:         Insv: 0     Comm: 0
Number of ILTC PMs:         Insv: 0     Comm: 0
Number of RMSC PMs:         Insv: 0     Comm: 0
Number of PTM PMs:          Insv: 0     Comm: 1
Number of DLM PMs:          Insv: 0     Comm: 0
Number of ADTC PMs:         Insv: 0     Comm: 0
Number of PDTC PMs:         Insv: 0     Comm: 0
Number of PHN PMs:          Insv: 0     Comm: 20
Number of IAC PMs:          Insv: 0     Comm: 0
Number of SMSR PMs:         Insv: 0     Comm: 1
Number of ILCM PMs:         Insv: 0     Comm: 0
Number of LCMI PMs:         Insv: 0     Comm: 3
Number of TDTC PMs:         Insv: 0     Comm: 0
Number of TLGC PMs:         Insv: 0     Comm: 0
Number of TLTC PMs:         Insv: 0     Comm: 0
Number of ALGC PMs:         Insv: 0     Comm: 0
Number of VSR PMs:          Insv: 0     Comm: 0
Number of LIM PMs:          Insv: 0     Comm: 4
Number of LIU7 PMs:         Insv: 0     Comm: 4
Number of TRCC PMs:         Insv: 0     Comm: 0
Number of PLGC PMs:         Insv: 0     Comm: 0
Number of SPM PMs:          Insv: 0     Comm: 0
Number of SDM PMs:          Insv: 0     Comm: 0
Number of ELCM PMs:         Insv: 0     Comm: 0
Number of LRU PMs:          Insv: 0     Comm: 0
Number of TACC PMs:         Insv: 0     Comm: 0
Number of TMS PMs:          Insv: 0     Comm: 2
Number of LDT PMs:          Insv: 0     Comm: 1
Number of FRIU PMs:         Insv: 0     Comm: 2
Number of FRCC PMs:         Insv: 0     Comm: 0
Number of CFP PMs:          Insv: 0     Comm: 0
Number of TPC PMs:          Insv: 0     Comm: 2
Number of PND PMs:          Insv: 0     Comm: 0
Number of RCCI PMs:         Insv: 0     Comm: 1
Number of ARCC PMs:         Insv: 0     Comm: 0
Number of ALCM PMs:         Insv: 0     Comm: 0
Number of SMA PMs:          Insv: 0     Comm: 1
Number of FILP PMs:         Insv: 0     Comm: 1
Number of AP PMs:           Insv: 0     Comm: 1
Number of HSI PMs:          Insv: 0     Comm: 0
Number of HSI2 PMs:         Insv: 0     Comm: 0
Number of DTCI PMs:         Insv: 0     Comm: 1
Number of EIU PMs:          Insv: 1     Comm: 2
Number of IDT PMs:          Insv: 0     Comm: 3
Number of LCME PMs:         Insv: 0     Comm: 1
Number of DA PMs:           Insv: 0     Comm: 0
Number of ORDB PMs:         Insv: 0     Comm: 0
```

```
Number of ICP PMs:          Insv: 0     Comm: 0
Number of EXND PMs:         Insv: 0     Comm: 2
Number of HSLR PMs:         Insv: 0     Comm: 0
Number of PSP PMs:          Insv: 0     Comm: 0
Number of ELIU PMs:         Insv: 0     Comm: 0
Number of CFI PMs:          Insv: 0     Comm: 0
Number of IPE PMs:          Insv: 0     Comm: 0
Number of XLIU PMs:         Insv: 0     Comm: 2
Number of PRCC PMs:         Insv: 0     Comm: 0
Number of DTM PMs:          Insv: 0     Comm: 1
Number of ICRM PMs:         Insv: 0     Comm: 0
Number of APU PMs:          Insv: 0     Comm: 3
Number of RCC2 PMs:         Insv: 0     Comm: 1
Number of DFI PMs:          Insv: 0     Comm: 0
Number of SRU PMs:          Insv: 0     Comm: 0
Number of ITAC PMs:         Insv: 0     Comm: 0
Number of HLIU PMs:         Insv: 0     Comm: 0
Number of GSMP PMs:         Insv: 0     Comm: 0
Number of VPU PMs:          Insv: 0     Comm: 1
Number of SRCC PMs:         Insv: 0     Comm: 0
Number of HSIE PMs:         Insv: 0     Comm: 0
Number of NIU PMs:          Insv: 0     Comm: 2
Number of RCO2 PMs:         Insv: 0     Comm: 0
Number of STS PMs:          Insv: 0     Comm: 0
Number of SPX PMs:          Insv: 0     Comm: 0
Number of CTM PMs:          Insv: 0     Comm: 1
Number of SMA2 PMs:         Insv: 0     Comm: 1
Number of GPP PMs:          Insv: 0     Comm: 0
Number of AMC PMs:          Insv: 0     Comm: 0
Number of AIM PMs:          Insv: 0     Comm: 0
Number of OSN PMs:          Insv: 0     Comm: 0
Number of OSNM PMs:         Insv: 0     Comm: 1
Number of OSAC PMs:         Insv: 0     Comm: 0
Number of CAU PMs:          Insv: 0     Comm: 0
Number of CIU PMs:          Insv: 0     Comm: 0
Number of CAVU PMs:         Insv: 0     Comm: 0
Number of ILD PMs:          Insv: 0     Comm: 0
Number of TRLE PMs:         Insv: 0     Comm: 0
Number of ACE PMs:          Insv: 0     Comm: 0
Number of NIL_PMTYPE PM     Insv: 0     Comm: 0

Number of LTC_ISDN PMs:     Insv: 0     Comm: 2
Number of LGC_ISDN PMs:     Insv: 0     Comm: 1
Number of SMU_ISDN PMs:     Insv: 0     Comm: 1

Number of DATAFILLED lines: 19100
Number of DATAFILLED POTS lines: 14702
Number of DATAFILLED IBN/RES lines: 3555
Number of DP_POTS lines: 7353
Number of DGT_POTS lines: 7349
Number of DP IBN/RES lines: 1714
Number of DGT IBN/RES lines: 1841
Number of TOTAL_UNEQ lines: 11615
Number of TOTAL_OFFL lines: 9277

Number of PPHONE_STATION lines: 815
Number of DISPLAY_PPHONE_STATION lines: 2
Number of DATA_UNIT_STATION lines: 4
Number of POTS_DATA_UNIT_STATION lines: 0
Number of M2009_STATION lines: 0
Number of M2112_STATION lines: 0
Number of M2018_STATION lines: 0
Number of MADO_STATION lines: 0
Number of M5009_STATION lines: 9
```

```
Number of M5112_STATION lines: 2
Number of M5317_STATION lines: 0
Number of M5008_STATION lines: 0
Number of ISDN_STATION lines: 5
Number of M3000_STATION lines: 0
Number of M2317_STATION lines: 0
Number of M5209_STATION lines: 2
Number of M5312_STATION lines: 4
Number of M2008_STATION lines: 0
Number of M2616_STATION lines: 0
Number of M2016S_STATION lines: 0
Number of M2216A_STATION lines: 0
Number of M2216B_STATION lines: 0
Number of MPDA_STATION lines: 0
Number of M2006_STATION lines: 0
Number of NIL_STATION lines: 0
Number of ASR_STATION lines: 0
Number of M5212_STATION lines: 0
Number of ISLCKSET_STATION lines: 0
Number of M5208_STATION lines: 0
Number of M5216_STATION lines: 0
Number of M5316_STATION lines: 0
Number of MCA_STATION lines: 0

Number of DNs on keysets: 4038

Number of POTS lines with CSDDS option: 3
Number of POTS lines with Call Waiting Feature: 4333
Number of POTS lines with Call Forwarding Feature: 2012
Number of POTS lines with Remote Call Forwarding: 9
Number of POTS lines with Call Forwarding Busy: 0
Number of POTS lines with Call Forward Don't Answer: 0
Number of POTS lines with Speed Call Feature: 1692
Number of POTS lines with Three-Way Call Feature: 2891
Number of POTS lines with Three-Way Call Public Feature: 0
Number of IBN/RES lines with Call Waiting Feature: 322
Number of IBN/RES lines with Call Forwarding Feature: 2119
Number of IBN/RES lines with Three-Way Call Feature: 66
Number of IBN/RES lines with Three-Way Call Public Feature: 163
Number of IBN/RES lines with Speed Call Feature: 943
Number of KSET lines with Call Waiting Feature: 11
Number of KSET lines with Call Forwarding Feature: 798
Number of KSET lines with Three-Way Call Feature: 797
Number of KSET lines with Three-Way Call Public Feature: 0
Number of KSET lines with Speed Call Feature: 14
Number of HOTEL/MOTEL lines with register pulsing: 122
Number of INWATS lines: 2
Number of lines with TEEN service: 1
NUMBER OF DATAFILLED RES LINES: 1763
Number of RES lines with SMDI: 0
Number of RES lines with features: 956
  RES feature: COT NO. OF LINES: 127
  RES feature: CFF NO. OF LINES: 0
  RES feature: CFI NO. OF LINES: 0
  RES feature: CFRA NO. OF LINES: 2
  RES feature: CFK NO. OF LINES: 0
  RES feature: CFB NO. OF LINES: 0
  RES feature: CBI NO. OF LINES: 0
  RES feature: CBE NO. OF LINES: 0
  RES feature: CBU NO. OF LINES: 0
  RES feature: CFD NO. OF LINES: 0
  RES feature: CDI NO. OF LINES: 0
  RES feature: CDE NO. OF LINES: 0
  RES feature: CDU NO. OF LINES: 0
```

```
  RES feature: SC1 NO. OF LINES: 0
  RES feature: SC2 NO. OF LINES: 350
  RES feature: SC3 NO. OF LINES: 176
  RES feature: CFU NO. OF LINES: 178
  RES feature: SCS NO. OF LINES: 0
  RES feature: CNDB NO. OF LINES: 127
  RES feature: SMDI NO. OF LINES: 0

Number of trunks: 15256
Number of unequipped trunks: 0
Number of offline trunks: 15212
Number of trunk groups: 500
Number of IBNTI trunks: 6
Number of IBNTO trunks: 3
Number of IBNT2 trunks: 5
Number of PRA IBNT2 trunks: 0
Number of SC trunks: 0
Number of OP trunks: 0
Number of AOSS trunks: 0
Number of TOPS trunks: 0
Number of RONI trunks: 0

Number of RCVRMF receivers: 20
Number of RCVRDGT receivers: 16
Number of RCVRATD receivers: 0
Number of RCVRMCCS receivers: 0
Number of MF300 receivers: 0
Number of DGT300 receivers: 0
Number of KSR2OCVR receivers: 0
Number of KSR2ICVR receivers: 0
Number of RCVRCOIN receivers: 0
Number of RCVRATDA receivers: 0
Number of RCVATDUK receivers: 0
Number of RCVRDTUK receivers: 0
Number of RCVRCDC receivers: 0

Number of CF3 circuits: 6
Number of CF6 circuits: 1
Number of LTUs: 6
Number of TTUs: 3
Number of ATUs: 0
Number of DTUs: 0

Number of VDUs: 16

Number of ST connections: 4
Number of IPML connctions: 5
Number of nailed up CLLIs: 1

Number of customer groups: 29
Number of consoleless customer groups: 7
Number of members per customer group:
  Group: ASRDFLT
     NO. OF MEMBERS: 0
  Group: PFDEFAULT
     NO. OF MEMBERS: 0
  Group: POTSDATA
     NO. OF MEMBERS: 0
  Group: PRADEFAULT
     NO. OF MEMBERS: 0
  Group: COMIBN2
     NO. OF MEMBERS: 3
  Group: GOC
     NO. OF MEMBERS: 0
```

```
  Group: COMIBN3
     NO. OF MEMBERS: 3
  Group: COMIBN6
     NO. OF MEMBERS: 1
  Group: COMKODAK
     NO. OF MEMBERS: 12
  Group: CENTESN
     NO. OF MEMBERS: 0
  Group: GOC990
     NO. OF MEMBERS: 4
  Group: COMIBN4
     NO. OF MEMBERS: 1
  Group: COMIBN5
     NO. OF MEMBERS: 1
  Group: COMIBN7
     NO. OF MEMBERS: 0
  Group: BRAMESN
     NO. OF MEMBERS: 0
  Group: LONDESN
     NO. OF MEMBERS: 0
  Group: RES
     NO. OF MEMBERS: 1760
  Group: BCSLAB1
     NO. OF MEMBERS: 0
  Group: BCSLAB
     NO. OF MEMBERS: 2586
  Group: TESTGRP1
     NO. OF MEMBERS: 0
  Group: JONCUST
     NO. OF MEMBERS: 1
  Group: IBNGRP1
     NO. OF MEMBERS: 24
  Group: ISDN
     NO. OF MEMBERS: 2
  Group: LABTEST
     NO. OF MEMBERS: 0
  Group: PSTNACCESS
     NO. OF MEMBERS: 0
  Group: A
     NO. OF MEMBERS: 0
  Group: B
     NO. OF MEMBERS: 0

Number of customer subgroups: 24
Number of attendant consoles: 2

Number of TOPS positions: 1
Number of OPERATOR positions: 1
Number of IN CHARGE positions: 0
Number of ASSISTANCE positions: 0
Highest operator number datafilled: 0

Number of AOSS Positions: 0
Highest AOSS team number: 0
Highest AOSS operator: 0

Number of CAMA Positions: 1

Number of Orig Rate Centres: 0
Maximum Orig Rate Centre: 0
Number of Term Rate Centres: 0
Maximum Term Rate Centre: 0
```

```
Number of MDC lines allocated: 1073741823
Number of ACD LINES allocated: 4000
Number of VL members: 2
Number of VIRT groups: 19
Number of hunt groups: 76
Number of UCD groups: 11
Number of ACD groups: 16
Number of ENHANCED ACD group: 2
Number of ENHANCED ACD agent: 0
Number of BASIC ACD group: 14
Number of BASIC ACD agent: 9
Number of CMS lines: 1763
Number of POTS COIN lines: 29
Number of FGA lines: 188
Number of OUTWATS lines: 2
Number of MDC 2500 lines: 3555
Number of MDC MBS lines: 0
Number of SMDI lines: 0
Number of allocated TICS/LEAS DNs: 50000
Number of DATAPATH lines: 4
Number of DIALAN lines: 0
Number of total ISDN lines: 0
Number of ISDN FUNCT BRA lines: 3
Number of ISDN STIM BRA lines: 0
Number of ISDN BRA MFT lines: 2
Number of ISDN PRA trunks: 5
Number of datafilled CLASS lines: 1826
  CLASS FEATURE: ACB        NO. OF LINES: 128
  CLASS FEATURE: ACBAMA     NO. OF LINES: 126
  CLASS FEATURE: AR         NO. OF LINES: 192
  CLASS FEATURE: ARAMA      NO. OF LINES: 126
  CLASS FEATURE: CNDB       NO. OF LINES: 127
  CLASS FEATURE: CNDBAMA    NO. OF LINES: 126
  CLASS FEATURE: COT        NO. OF LINES: 128
  CLASS FEATURE: COTAMA     NO. OF LINES: 126
  CLASS FEATURE: CND        NO. OF LINES: 879
  CLASS FEATURE: DDN        NO. OF LINES: 877
  CLASS FEATURE: SCRJ       NO. OF LINES: 876
  CLASS FEATURE: SCF        NO. OF LINES: 176
  CLASS FEATURE: SCA        NO. OF LINES: 876
  CLASS FEATURE: DRCW       NO. OF LINES: 875

SMDR is being used
record stop onto sfdev
```

Equipment Counts

The following sections define the some individual counts and the equivalent CI commands.

Number of Nodes

To display the total number of nodes in the office, use the following CI command string:

```
>TABLE NNASST;BOT
```

Note: The node count displays the highest node number + 1. If a node that did not have the highest node number was deleted from the system, the display indicates the incorrect number of nodes.

Number of Networks

To display the total number of networks in the office, use the following CI command string:

```
>ERASE A B C
>TABLE OFCOPT;POS NETWORK_ACTIVE
>ASSIGN PARMAVAL A
>((SUBSTR A ((STRSIZE A) - 4)4 ) = 'JNET') -> B
>IF B THEN (TABLE NETWORK;COUNT/2->C) ELSE (TABLE ENVINV;COUNT->C)
>QUIT
>PRINT C
```

Number of Peripheral Modules

All Peripheral Module (PM) counts are output using a single count procedure. Each count output shows the following:

- The type of peripheral module.
- The number of modules in the "Insv:" state the number of modules that are in the "system busy", "c side busy – in–service", "OK", or "in–service trouble" state.
- The number of modules in the "Comm:" state the number of modules in the "unequipped", "offline", or "man busy state".

```
>MAPCI;MTC;PM;STATUS
```

Number of Working Lines in the Office

The total number of working lines in the office is the sum of the following counts listed in the EQUIPCOUNTS output.

- Number of Dial Pulse POTS (DP_POTS) lines.
- Number of Digitone POST (DGT_POTS) lines.
- Number of Dial Pulse Integrated Business Network/Residential Enhances Services (DP_IBN/RES) lines.
- Number of Digitone Integrated Business Network/Residential Enhances Services (DGT_IBN/RES) lines.
- Total number of tuples in table KSETINV (Key Set Inventory).

```
>DMSMON;EQPCOUNTS;QUIT
>TABLE KSETINV;COUNT;QUIT
```

Number of Dial–Pulse POTS Lines

To display the total number of POTS lines with Dial–Pulse (DP) signaling, use one of the following CI command strings:

```
>TABLE LENLINES
>COUNT (SIGTYPE EQ 'DP')
>QUIT
```

Number of Digitone POTS Lines

To display the total number of POTS lines with the Digitone (DGT) line option use one of the following command strings:

```
>TABLE LENLINES
>COUNT (SIGTYPE EQ 'DGT')
>QUIT
```

POTS Lines with Call Forwarding

To display the total number of POTS lines with a call forwarding feature, enter the following CI command string:

```
>TABLE CFW
>ERASE A B
>0->A
>ASSIGN CFZINFO B
>IF ((SUBSTR B 0 3) = 'LCL') THEN (A+1->A)
>WHILE (NEXT) (ASSIGN CFZINFO B;
>IF ((SUBSTR B 0 3) = 'LCL') THEN (A+1->A))
>PRINT A
>QUIT
```

POTS Lines with Call Forwarding Busy

To display the total number of POTS lines with the Call Forwarding Busy Line (CFBL) option, enter the following CI command string:

```
>QLENWRK ALL ALL NLCC CFBL S
```

POTS Lines With Remote Call Forwarding

To display the total number of POTS lines with Remote Call Forwarding (RCF) option, enter the following CI command string:

```
>TABLE CFW
>ERASE A B
>0->A
>ASSIGN CFZINFO B
>IF ((SUBSTR B 0 3) = 'REM') THEN (A+1->A)
>WHILE (NEXT)(ASSIGN CFZINFO B;
>IF ((SUBSTR B 0 3) = 'REM) THEN (A+1->A))
>PRINT A
>QUIT
```

Number of INWATS Lines

To display the total number of INWATS lines, enter the following CI command string:

```
>TABLE LINEATTR
>LIST ALL (LCC EQ 'INW')
>QUIT
```

Repeat the following CI command string for each line attribute tuple displayed.

```
>TABLE LENLINES
>COUNT (LNATTIDX EQ 'XXXX')
>QUIT
```

Where XXXX is the line attribute tuple. The total number of INWATT lines is the sum of the two attribute tuples.

Number of OUTWATS Lines

To display the total number of OUTWATS lines, enter the following CI command string:

```
>TABLE LINEATTR
>COUNT (FEATURE EQ 'OUTWT UNOW *')
>QUIT
```

Number of Receivers

To display the total number of receivers on the switch, enter the following CI command string. Enter one receiver code per line. Refer to the table that follows the CI COUNT command for the entry required to specify the desired receiver type:

```
>TABLE RECEIVER
>COUNT (RCVRKEY EQ 'XXXX *')
```

Where XXXX is the type of receiver listed in the table below:

Receiver Entry Codes

Receiver Type	Entry XXXX
MF Receiver	RCVRMF
Digitone Receiver	RCVRDGT
Audio Tone Detectors	RCVRATD
Digitone receiver dedicated to mechanized calling card feature.	RCVRMCCS
MF receiver, but needs different peripheral execs.	RCVRMF300
Digitone receiver, but needs different peripheral execs.	RCVRDGT300
Coin phone receiver, Digitone, and coin detection circuit.	RCVRCOIN
Same as RCVRCOIN, but supports 5X29AB and 5X29AC.	RCVRATDA
Same as RCVRCOIN, but can also generate LAMA billing records by coin originated calls.	RCVRCDC

Number of Line Test Units

To display the total number of Line Test Units (LTU), enter the following CI command string:

```
>TABLE TRKMEM
>COUNT (CLLI EQ 'LTU')
>QUIT
```

Number of Visual Display Units

To display the total number of Visual Display Units (VDU), enter the following CI command string:

```
>TABLE TERMDEV
>COUNT
>QUIT
```

Note: The number of VDUs is the sum of all visual display units, printers and subscriber message desk interface devices.

Number of Members per Customer Group

To display the total number of members in each customer groups, enter the following CI command string. Repeat the CI command string for each SYMBOL field entry:

```
>ERASE TRIM
>COMMAND TRIM (SEND SINK;ERASE Y Z;0->Y;
>WHILE((SUBSTR @1 Y 1) = ' ') (Y+1->Y);
>(SUBSTR @1 Y ((STRSIZE @1) - Y))->Z;SEND PREVIOUS)
>TABLE KSETLINE
>FORMAT PACK
>ERASE A B C D
>ASSIGN DNRESULT B
>'ABCDEFGHIJKLMNOPQRS' -> C >0->A
>TRIM (SUBSTR B 21 16)
>IF ((SUBSTR B 0 3) ^= 'GIC') THEN (IF (Z = 'XXXXX') THEN (A+1->A))
>IF (A > 0) THEN (ASSIGN KSETKEY C)
>WHILE (NEXT) (ASSIGN DNRESULT B;ASSIGN KSETKEY D;
>IF ((SUBSTR C 0 17) ^= (SUBSTR D 0 17)) THEN (
>IF ((SUBSTR B 0 3) ^= 'GIC') THEN (
>TRIM (SUBSTR B 21 16);IF (Z = 'XXXXX') THEN (A+1->A;D->C))))
>PRINT A
```

Note the number displayed.

```
>QUIT
>TABLE ATTCONS
>COUNT (CUSTNAME EQ 'XXXXX')
```

Note the number displayed.

```
>QUIT
>TABLE IBNLINES
>FORMAT PACK
>ERASE A B >0->A
>ASSIGN RESULT B
>IF ((STRSIZE B > 42) THEN (IF ((SUBSTR B 7 3) = 'IBN') THEN(
>TRIM (SUBSTR B 26 16);IF (Z = 'XXXXX') THEN (A+1->A)))
>WHILE (NEXT) (ASSIGN RESULT B;IF ((STRSIZE B) > 42) THEN (
>IF ((SUBSTR B 7 3) = 'IBN') THEN (
>TRIM (SUBSTR B 26 16);IF (Z = 'XXXXX') THEN (A+1->A))))
>PRINT A
```

Where XXXXX is equal to the entry in the symbol field of table CUSTNAME. The total number of members in each customer group is the sum of the three numbers noted above.

Improvised Counter–I.E.D. Armor – Part 2

Overview

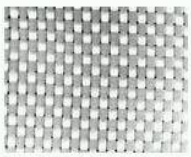
As a followup to an article in *GBPPR 'Zine #33* on improvised armor, this idea is based on using old Ceramic Dual In–Line Package (CERDIP) integrated circuits, and even some old computer CPUs, as "hardplate" armor. The idea is that the hard ceramics which are used for the cases on these integrated circuits, can also be used to deflect any incoming shrapnel. Does it really work? I have no idea on how to test this stuff in the real world... But, it is fun to mess around with. The hard, but brittle, ceramic cases to tend to break into a million little pieces on impact. This might be good, as it is dissipating energy, but on the other hand, you are making even more shrapnel.

It would probably be a good idea to wrap this entire contraption in several (hundred?) layers of Kevlar material. A good source for large rolls of Kevlar material is from homebrew aircraft suppliers. The Kevlar material does appear to need a special set of shears to cut through it, though. Wicks Aircraft Supply, www.wicksaircraft.com, sells different types of Kelvar material at around $18 per yard:

Excerpt from a Wicks Aircraft Supply catalog:

> Aramid fiber, one of the newest and most far–reaching developments of textile research, has the highest strength–to–weight ratio of any commercially available fiber. Kevlar gives airplane builders a significant design edge by allowing designers and builders to save weight and increase strength in their aircraft. Kevlar aramid has an excellent combination of weight, high–strength, outstanding toughness with abuse resistance, and stiffness, that can be put to good use in the production of light aircraft. Kevlar fibers have a density 43% lower than fiberglass and 23% to 30% lower than the various graphite and carbon fibers. Kevlar 49 is 2.5 times as strong as the commercially used E–glass and greater than ten times as strong as aluminum on a specific tensile strength basis. Kevlar has good chemical resistance and meets FAA flammability requirements as it does not melt or support combustion. It provides a less rigid structure, with even better damage resistance. Composites of Kevlar are more durable than those of fiberglass and carbon because the aramid fiber provides superior resistance to damage, vibration, and crack propagations, as well as excellent fatigue resistance. Although Kevlar has many advantages over conventional fiberglass weaves, it is very difficult to cut. Special scissors have been developed to facilitate cutting. These scissors have a wear–resistant coating which is metallurgically bonded to the steel substrate. The coating will not chip or peel off and can be sharpened.

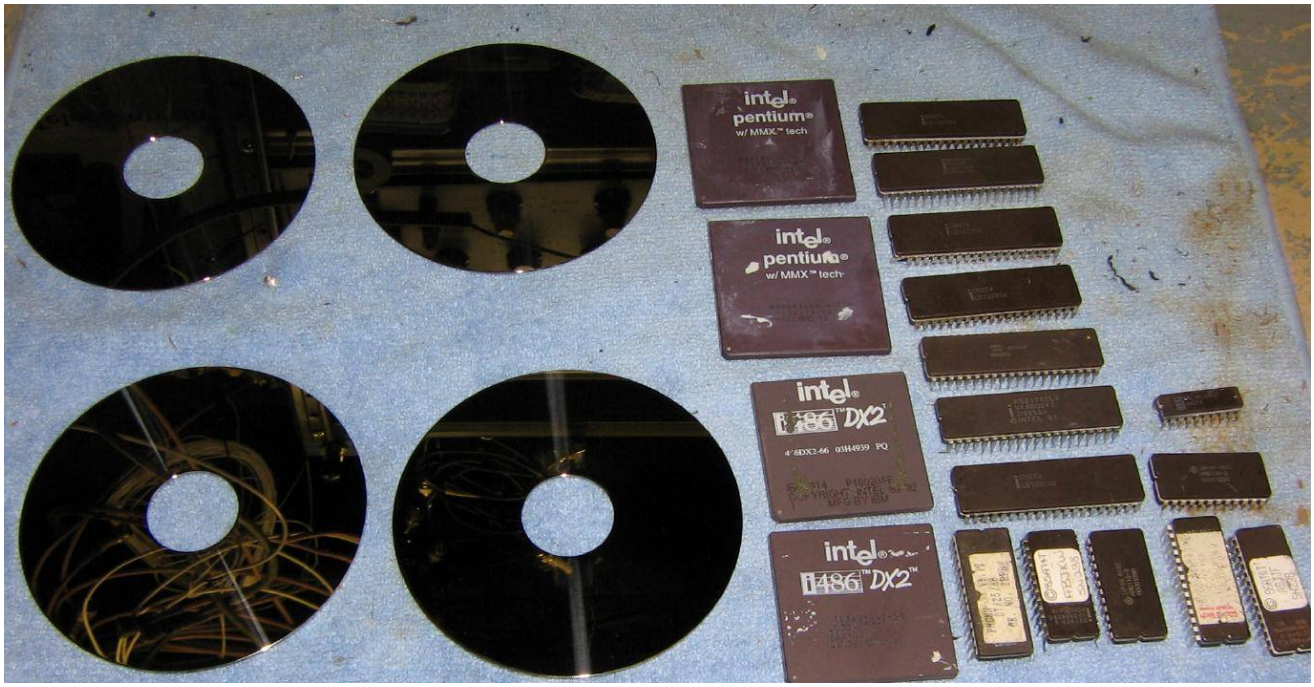
281 KEVLAR BI DIRECTIONAL



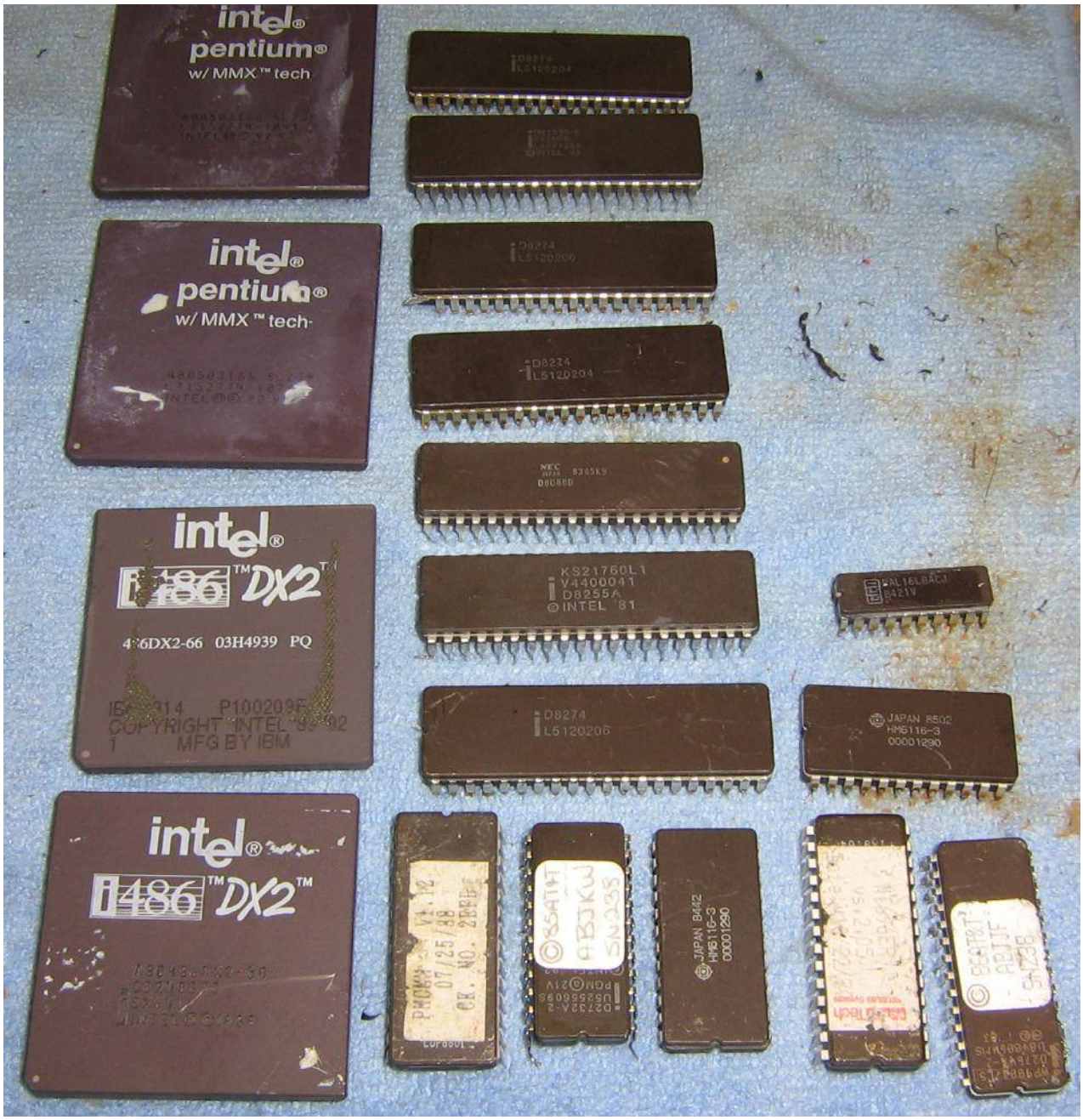
Plain weave has a weight of 5.0 ounce p/sq. yd., 010 thickness, tensil strength is 620x 655. The cloth is 38" wide - sold by the running yard only. Can be used with epoxy, polyester and vinylester resins.

TYPE	WEIGHT	PART NUMBER	YARD	QTY
PLAIN WEAVE	5.0 OZ P/SQ/YD	281	18.18	

Pictures & Notes



Overview. Four hard drive platters are on the left, and several ceramic packaged CPUs and integrated circuits are on the right. The CPUs are old Intel Pentiums and 486s. These seem to be the best choice, as their ceramic cases are physically larger.

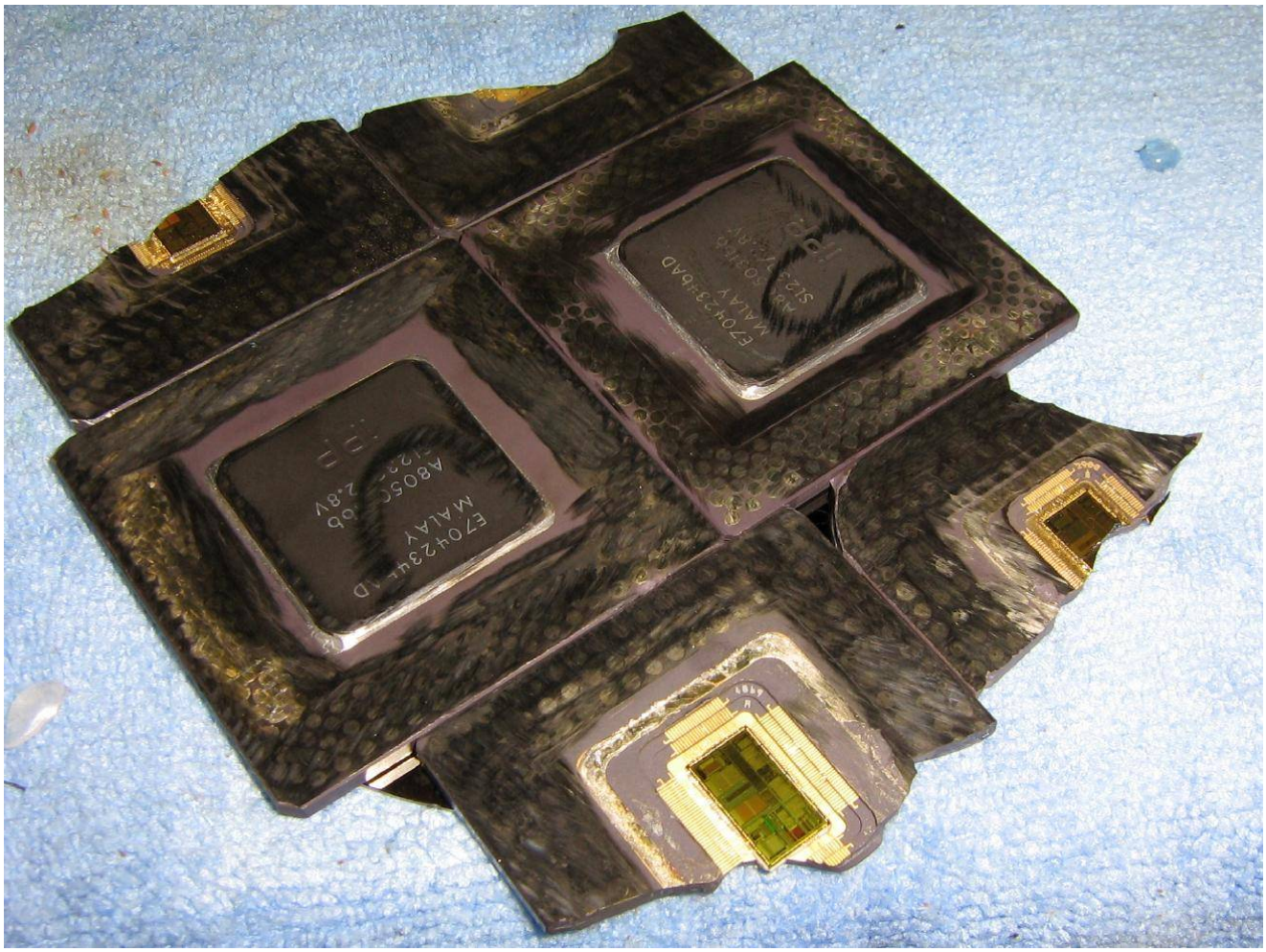


Close up of the CERDIP integrated circuits. You'll need to scarf up old circuit boards at ham radio swapfests to get a large assortment of CERDIP integrated circuits. I found old AT&T telecom circuit boards to be filled with them.

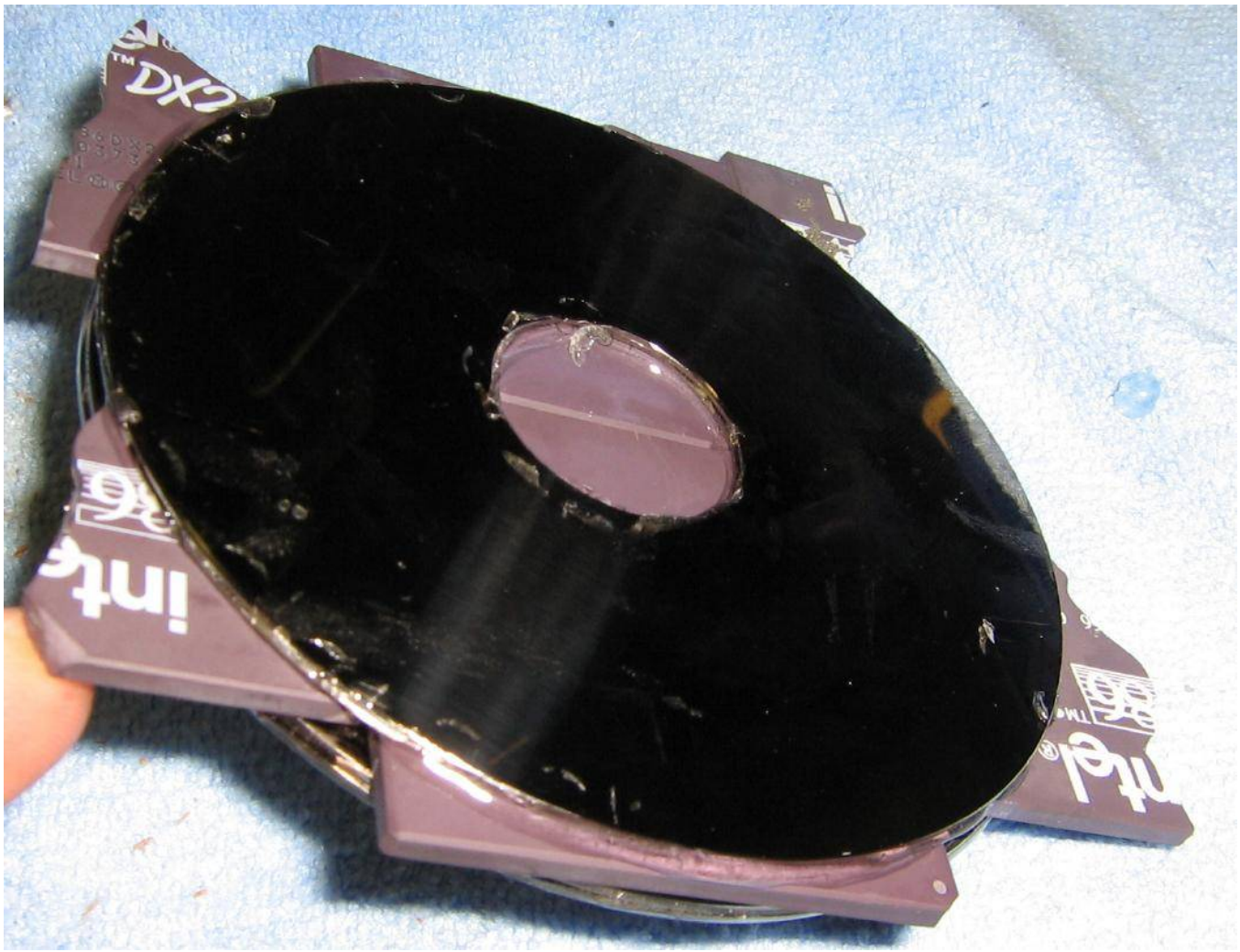
Start like we did in the last issue by epoxying two hard drive platters together. Also do this with the other two platters. The idea is to sandwich the ceramics between the two new dual–platters.

You'll need to grind down the metal pins on the CPUs and integrated circuits. Use an angle grinder with an abrasive wheel attachment. Don't push down too hard, or the CPU will snap in half.

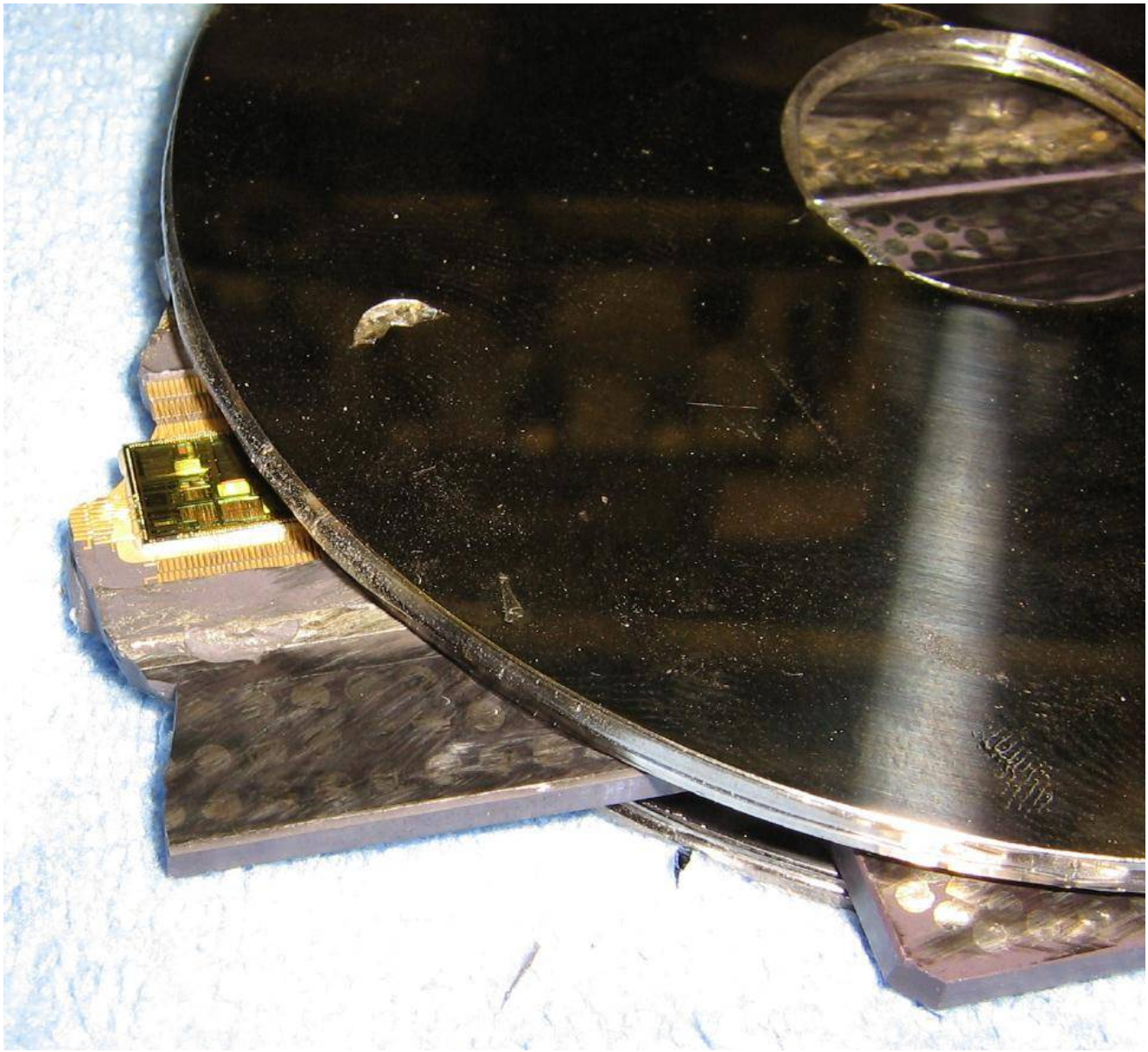
Intel Pentium CPU with the pins ground down. You may want to also grind down the little brazed "cap" that protects the actual CPU. This is the high spot in the middle with the letters printed on it. This will also help the CPU to sit flat when epoxied to the drive platters.



You can snap the CPU into smaller pieces to fill the platters. You'll want to grind down any sharp points when used for "real world" applications.



Epoxy everything together like so. Total weight for this plate was 6.15 ounces.



Close up view. You'll want to make sure that the ceramic cases are all level. That will be a problem if you mix and match CPUs and integrated circuits. Grinding down the sharp points is also a very good idea, but will take awhile.

Bonus

EDITORIAL

Hackers.

■A "Computer Hacker" is a thief. A crook who uses his computer to attempt to break into other computers and leave evidence that he has done so. These low-lifes try to get into bank computers and louse up the records, one even got into a hospital's computer and did so much damage to the records that lives were actually jeopardized. They try to get into school computers and screw up those records too.

Some of them have successfully broken into classified government computer systems, endangering the security of our country. They form clubs and swap coded information, they have magazines that offer tips to improve their skills.

We'd like to go on record. We're anti-hacker. These thieves, for that's exactly what they are, are giving *all of us* a bad name. They've been getting a lot of publicity lately, and it's all bad. Sure, they try to come off as "boy genius" types that are so adept at using their computers that they can foil the most-professional anti-hacker security systems. But break down what they're doing and how they're doing it, and you see that all they do is nothing but drudgery, repeating and repeating with minor changes until they break in. There is nothing at all intelligent about what they do, and especially the way in which they do it. If they *do* manage to break a code, it's usually the result of a freak accident. Certainly not the product of any intelligence on their parts.

Hackers are morons with computers. They've got nothing else to occupy their minds, they're hungry for a little notoriety, and for my part, they should be treated as exactly what they are—crooks. There's no redeeming quality at all in them, they are *not* to be admired, and what they're doing hurts all of us.

How? I saw the same thing happen in amateur radio, later in CB. The good guys have to take the heat for the bad guys. Some guy with a signal squirter louses up every TV in the neighborhood, and any ham that tries to put up an antenna gets dirty looks from the neighbors.

It's the same with computers. If your neighbors know you have a computer, and they see the news stories about what the horrible hackers are doing, you're going to be painted by the same broad brush.

You may have a friend who hacks. If you do, do him a favor. Redirect his thinking into something more substantial. Get him involved in baseball, or stamp collecting, or introduce him to a girl.

Just get him away from his computer.

Byron G. Wels

Byron G. Wels
Editor

ComputerDigest is published monthly as an insert in Radio-Electronics magazine by Gernsback Publications, Inc., 200 Park Avenue South, New York, NY 10003. Second-Class Postage Paid at New York, N.Y. and additional mailing offices. All rights reserved. Printed in U.S.A.

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COMPUTER DIGEST

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Gernsback Publications, Inc.
200 Park Ave. South
New York, NY 10003
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ADVERTISING SALES 212-777-6400
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End of Issue #34

Any Questions?

Editorial and Rants

Bawwwhhahahaahahahahaahaahaaahah!!!

Eurosavage land isn't going to exist in 50 years!

European Defence Agency Paints Grim Picture of Future

October 3, 2006 – *From: www.eubusiness.com*

The European Union will become older, poorer and increasingly vulnerable to wide–scale immigration from its neighbours, according to a new European Defence Agency report.

The agency also highlights the problems of increasing unemployment and desertification in its 32–page "long–term vision" for European defence needs which will be presented to EU defence ministers meeting in Finland on Tuesday.

The document, described by one diplomat as "pretty bleak", is the result of a year's work identifying the main trends for EU member nations and their defence needs.

The overall picture is of an aging, less prosperous Europe surrounded by regions –– Africa, Middle East, Russia –– "which may be struggling to cope with the consequences of globalisation".

The average age of Europeans, who will only make up six percent of the global population, will rise to 45, while in Africa the average will be 22 years old.

The African population will pass 1.3 billion by 2025 (up 48 percent) with the Middle East seeing a similar percentage rise, according to the report.

Given increased desertificiation and high unemployment, especially in Africa, "the implications for despair, humanitarian disaster and migratory pressures are obvious", the report asserts.

Europe's fragility will be aggravated by its increasing dependence on imports of oil and gas, it added.

Its ally America, focussing all its attention on the rising giant of Asia, will tend to distance itself more and more from Europe, according to the EDA.

"Relatively poorer, older and more anxious about its security, Europe may also find itself increasingly alone in confronting the problems of a difficult neighbourhood."

Europe is also no longer very well armed to confront the mounting dangers it faces, the report adds.

As the falling birth rate increases competition in the job market, the pool of 16–30 year olds available to the armed forces will drop by 15 percent by 2025.

In order to avoid ballooning personnel costs –– already 50 percent of the military budget –– as competition for young employees increases, a reduction in the number of Europeans in uniform, currently around two million, seems inevitable.

Outsourcing, automation and reducing superfluous capacity are among the remedies considered by the EDA.

Neither is the prognosis encouraging for Europe's defence technological and industrial base, which the EDA deems to be already deficient.

"Europe ... must take to heart the facts that US is outspending Europe six to one in defence R and D, that it devotes some 35 percent of its defence expenditure to investment (from a budget more than twice as large as that of the Europeans combined) as against the European level of about 20 percent and that it is increasingly dominant in global export markets".

Among the sources for its report the EDA cited defence ministries, the Paris–based Institute of Security Studies, the EU's military commission, NATO and "numerous specialists".

The agency, under the Council of the European Union, was set up in 2004 to improve EU member states' defence and crisis management and to sustain the European security and defence policy.

Proof all Muslims are unclean animals.

W.H.O. Says Handwash Taboo Spreads Infections

December 20, 2006 – *From: www.abc.net.au*

By Jean–Louis Santini

Religions that ban alcohol are partly to blame for the spread of infections in hospitals around the world because staff are not disinfecting their hands enough, say some experts.

A World Health Organisation (WHO) consultant has told the Interscience Conference on Antimicrobial Agents and Chemotherapy in Washington DC this week that too few doctors, nurses and other hospital workers follow hygiene rules.

"Every year the treatment and care of hundreds of millions of patients worldwide is complicated by infections acquired during health care in hospitals," says Dr. Benedetta Allegranzi, a WHO consultant from the University of Verona in Italy.

Cultural and religious factors "strongly influence" the lack of hand washing, she adds.

Attitudes toward washing hands "may be different according to the perception of 'dirtiness' in different cultures and to a healthcare worker's skin colour," Allegranzi says.

Helen Giamarellou of the Attikon university hospital in Athens presented the conference with results of a three year study that showed barely 25% of doctors disinfect their hands before attending to a patient.

The US Centers for Disease Control and Prevention says that nearly 90,000 people die each year from infections caught in US hospitals. About two million become ill from such infections each year.

Staphylococcus aureus bacteria resist the methicillin antibiotic and are the main cause of disease transmitted by dirty hands. Such illness has been growing around the world in the past 20 years, according to experts.

The WHO and other health groups have launched an international campaign to improve cleanliness in hospitals. It includes anthropologists among the experts, working on a clean hands strategy that takes into account religious and cultural factors.

The WHO recommends using an alcohol–based water solution to act as a quick disinfectant before touching patients.

The Jewish, Islamic and Sikh religions teach everyday cleanliness. But Islam, Buddhism and Hinduism and the Sikh religion all ban the use of alcohol.

Dr. Ziad Memish, executive director of infection prevention and control at the King Abdulaziz medical centre in Riyadh, and a member of theWHO taskforce on hospital cleanliness, has written a study on the use of alcohol–based hand rubs by Muslim health workers. He says "the crux of the problem appears to be due to the designation of alcohol as 'haram', or forbidden, in Islam".

But he adds that the Koran also recognises that alcohol has some medicinal virtues that can be used.

Objections from Muslims are more common in Western Europe than traditional Islamic countries, according to the study. Memish says the use of alcohol hand rubs had become a standard practice at his centre in recent years.

The Interscience Conference on Antimicrobial Agents and Chemotherapy meeting sponsors include Bristol–Myers Squibb, Cubist Pharmaceuticals, Inc., GlaxoSmithKline Pharmaceuticals, Merck & Co., Inc., Pfizer, Roche, sanofi–aventis, Tibotec Therapeutics, a Division of Ortho Biotech Products, L.P. and Wyeth.

You won't be hearing about this from Al Gore!

Cow 'Emissions' More Damaging to Planet Than CO2 From Cars

December 10, 2006 – *From: news.independent.co.uk*

By Geoffrey Lean

Meet the world's top destroyer of the environment. It is not the car, or the plane,or even George Bush: it is the cow.

A United Nations report has identified the world's rapidly growing herds of cattle as the greatest threat to the climate, forests and wildlife. And they are blamed for a host of other environmental crimes, from acid rain to the introduction of alien species, from producing deserts to creating dead zones in the oceans, from poisoning rivers and drinking water to destroying coral reefs.

The 400–page report by the Food and Agricultural Organisation, entitled Livestock's Long Shadow, also surveys the damage done by sheep, chickens, pigs and goats. But in almost every case, the world's 1.5 billion cattle are most to blame. Livestock are responsible for 18 per cent of the greenhouse gases that cause global warming, more than cars, planes and all other forms of transport put together.

Burning fuel to produce fertiliser to grow feed, to produce meat and to transport it – and clearing vegetation for grazing – produces 9 per cent of all emissions of carbon dioxide, the most common greenhouse gas. And their wind and manure emit more than one third of emissions of another, methane, which warms the world 20 times faster than carbon dioxide.

Livestock also produces more than 100 other polluting gases, including more than two–thirds of the world's emissions of ammonia, one of the main causes of acid rain.

Ranching, the report adds, is "the major driver of deforestation" worldwide, and overgrazing is turning a fifth of all pastures and ranges into desert.Cows also soak up vast amounts of water: it takes a staggering 990 litres of water to produce one litre of milk.

Wastes from feedlots and fertilisers used to grow their feed overnourish water, causing weeds to choke all other life. And th pesticides, antibiotics and hormones used to treat them get into drinking water and endanger human health.

The pollution washes down to the sea, killing coral reefs and creating "dead zones" devoid of life. One is up to 21,000sqkm, in the Gulf of Mexico, where much of the waste from US beef production is carried down the Mississippi.

The report concludes that, unless drastic changes are made, the massive damage done by livestock will more than double by 2050, as demand for meat increases.

More proof Eurosavages are the real enemy.

French Intefadeh

November 14, 2005 – *From: calsun.canoe.ca*

By Ezra Levant

The international media no longer start the news with France's riots, though they continue nightly.

This shift in coverage is not because each morning's tally of burnt–out cars has fallen from over 1,000 to merely several hundred, or because the number of towns and cities in which the riots occur has fallen from a high to 300 to a more modest 200 each night.

It is because the shock value of the riots is gone. The French intefadeh is the new normal.

The French media no longer exaggerate and gloat at America's challenges with hurricane Katrina –– they are now complaining the world's media exaggerates France's own inability to quell their nascent civil war.

But hurricane Katrina's initial horrible estimates of body counts turned out to be wildly exaggerated, as were the rumours of depravity in the Louisiana Superdome.

France, by contrast, has done everything it can to mask the true nature of its own problems –– a large and unassimilated mass of Muslim immigrants, in which a hard core of Islamic fascists operate.

Estimates vary as to the number of Muslims in France. The CIA's world factbook estimates it to be as high as six million. Other social scientists put the number as high as eight million. In 2004, French counter–intelligence estimated al–Qaida alone had 40,000 recruits in France that were engaged in paramilitary training.

That's half a percent of France's Muslim population, but it is apparent that many more are silent supporters –– or ad hoc co–operators, as many of the young rioters were. To call the riots spontaneous is to lie: Police discovered Molotov cocktail factories, and websites helped to co–ordinate the instigators in 300 cities and towns.

By comparison, there are fewer than six–million people in the entire Kingdom of Jordan, the site of last week's triple suicide bombings. Muslim France is becoming a political jurisdiction of its own –– with a population base larger and more radical than many proper countries. It is not merely the Cassandras on the right who see this new nation emerging. The response to the riots from France's socialist parties was for police to simply withdraw from the territories controlled by the rioters –– to withdraw the sovereignty of the French Republic, and yield to the sovereignty of the rioters, an appalling mixture of anarchy, criminal gangsterism and seething Islamofascism.

Stories of honour killings of young girls, or arson of Jewish shops and schools are no longer even news in France. That is the nature of the state trying to be born.

The last time Paris was invaded, it was from a foreign army that marched in, not a domestic army that stood up. Unlike the Nazis, the young rioters cannot be sent home –– they are at home, many of them born there, many naturalized.

Even if this current round of riots is defused, this problem will not go away. France's fertility rate is just 1.85 children per woman, far less than replacement rate. But that is an average that masks two realities, the rapidly growing Muslim community, and the effectively sterile pur laine French.

Last month, Canada's immigration minister bruited the idea of importing close to a million extra immigrants. That suits him fine, as immigrants tend to vote Liberal. But with Canada's official policy of multiculturalism –– that is, to oppose the cultural integration of new immigrants –– in concert with growing dominance of Muslim countries as the source of our immigrants, France in 2005 could be a glimpse of Canada in 2015.

Michael J. Fox sure is silent on this one! These are same people who think genetically engineered food is "bad."

Ukraine Babies in Stem Cell Probe

December 12, 2006 – *From: news.bbc.co.uk*

By Matthew Hill

Disturbing video footage of post–mortem examinations on dismembered tiny bodies raises serious questions about what happened to them.

Ukraine has become the self–styled stem cell capital of the world.

There is a trade in stem cells from aborted foetuses, amid unproven claims they can help fight many diseases.

But now there are claims that stem cells are also being harvested from live babies.

Wall of Silence

The BBC has spoken to mothers from the city of Kharkiv who say they gave birth to healthy babies, only to have them taken by maternity staff.

In 2003 the authorities agreed to exhume around 30 bodies of foetuses and full–term babies from a cemetery used by maternity hospital number six.

One campaigner was allowed into the autopsy to gather video evidence. She has given that footage to the BBC and Council of Europe.

In its report, the Council describes a general culture of trafficking of children snatched at birth, and a wall of silence from hospital staff upwards over their fate.

The pictures show organs, including brains, have been stripped – and some bodies dismembered.

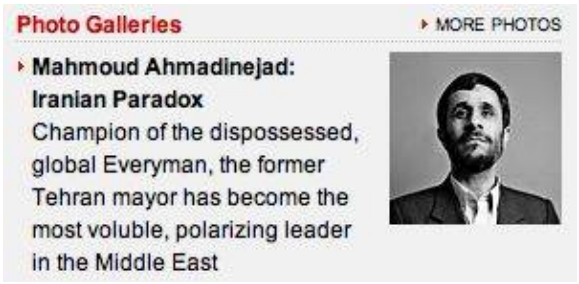
A senior British forensic pathologist says he is very concerned to see bodies in pieces – as that is not standard post–mortem practice.

It could possibly be a result of harvesting stem cells from bone marrow.

Hospital number six denies the allegations.

These guys would be really fun to party with.

Time Magazine photo caption changes. What liberal bias?



Yahoo! has also removed the following picture. This is *not* a Photoshop!

It was available at (URL is split):

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http://news.yahoo.com/photos/ss/events/us/
110906cindysheehan/im:/061121/photos_pl_afp/6c8fc763c022f25fa01cc2f93865ba3a
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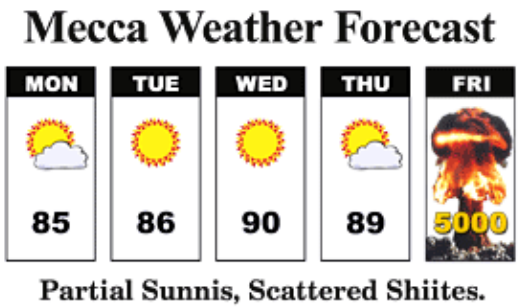
> Police block anti–war activists Cindy Sheehan (L) of the US, whose son Casey was killed during combat in Iraq in April 2004, and Medea Benjamin (R), the founding director of Code Pink, as they try to enter the headquarters of US Forces Korea (USFK) to meet the USFK head in Seoul. A group of US peace activists led by Sheehan staged a protest outside the headquarters base of US troops, urging a halt to the relocation of US military bases in South Korea. (AFP/Kim Jae–Hwan)

Cop Killer's Caucus

From: http://clerk.house.gov/evs/2006/roll527.xml

The House yesterday passed a resolution "condemning the decision of St. Denis, France, to name a street in honor of Mumia Abu–Jamal, the convicted murder [sic] of Philadelphia Police Office Danny Faulkner." The vote was 368–31, with 8 members voting "present." Here's a list of what one might call the Cop–Killer's Caucus, the congressmen who voted against the resolution, all Democrats:

Neil Abercrombie (Hawaii)	Carolyn Kilpatrick (Mich.)	Robert Scott (Va.)
William Clay (Mo.)	Barbara Lee (Calif.)	Jose Serrano (N.Y.)
Emanuel Cleaver (Mo.)	Cynthia McKinney (Ga.)	Fortney Hillman Stark Jr. (Calif.)
John Conyers (Mich.)	Gregory Meeks (N.Y.)	Edolphus Towns (N.Y.)
Jim Cooper (Tenn.)	Jerrold Nadler (N.Y.)	Tom Udall (N.M.)
Danny Davis (Ill.)	James Oberstar (Minn.)	Nydia Velazquez (N.Y.)
Raul Grijalva (Ariz.)	Major Owens (N.Y.)	Maxine Waters (Calif.)
Maurice Hinchey (N.Y.)	Ed Pastor (Ariz.)	Anthony Weiner (N.Y.)
Mike Honda (Calif.)	Donald Payne (N.J.)	Lynn Woolsey (Calif.)
Jesse Jackson Jr. (Ill.)	Charles Rangel (N.Y.)	
Eddie Bernice Johnson (Texas)	Bobby Rush (Ill.)	

The "present" votes came from Sam Farr (Calif.), Al Green (Texas), Luis Gutierrez (Ill.), Sheila Jackson–Lee (Texas), John Lewis (Ga.), George Miller (Calif.), Janice Schakowsky (Ill.) and Melvin Watt (N.C.). Tellingly, every member of the Pennsylvania delegation who was present voted "yes."

The most disturbing name on the "no" list is that of John Conyers. Granted, this is only a symbolic vote, but is it really a good idea to entrust the chairmanship of the Judiciary Committee to a man who casts a symbolic vote for a cop–killer and against his victim?